IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION, Plaintiff, v. MEDTRONIC VASCULAR, INC. BOSTON SCIENTIFIC CORPORATION, and SCIMED LIFE SYSTEMS, INC., Defendants.	C.A. No. 97-550-SLR (CONSOLIDATED)
BOSTON SCIENTIFIC CORPORATION, and SCIMED LIFE SYSTEMS, INC. Plaintiffs, v. ETHICON, INC., CORDIS CORPORATION, and JOHNSON & JOHNSON INTERVENTIONAL SYSTEMS CO. Defendants.	C.A. No. 98-19-SLR

EXHIBITS TO BOSTON SCIENTIFIC'S REPLY BRIEF
IN SUPPORT OF ITS CROSS-MOTION
TO DEFER FURTHER PROCEEDINGS AND FOR A NEW TRIAL

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July 8, 2008

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TABLE OF EXHIBITS

Exhibit
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- VOLUME D -
IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE
- - -

CORDIS CORPORATION, : CIVIL ACTION
Plaintiff :
:
vs. :
:
MEDTRONIC AVE, INC., BOSTON :
SCIENTIFIC CORPORATION and :
SCIMED LIFE SYSTEMS, INC., :
Defendants : NO. 97-550 (SLR)
- - - - -
BOSTON SCIENTIFIC CORPORATION : CIVIL ACTION
and SCIMED LIFE SYSTEMS, INC., :
Plaintiffs :
:
vs. :
:
ETHICON, INC., CORDIS CORP. :
and JOHNSON & JOHNSON :
INTERVENTIONAL SYSTEMS CO., :
Defendants : NO. 98-19 (SLR)
- - - - -
CORDIS CORPORATION, : CIVIL ACTION
Plaintiff :
:
vs. :
:
MEDTRONIC AVE, INC., BOSTON :
SCIENTIFIC CORPORATION and :
SCIMED LIFE SYSTEMS, INC., :
Defendants : NO. 98-197 (SLR)
- - -
Wilmington, Delaware
Tuesday, March 22, 2005
9:20 o'clock, a.m.
- - -
BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury
- - -
Valerie J. Gunning and
Leonard A. Dibbs,
Official Court Reporters

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APPEARANCES:

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- - -

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PROCEEDINGS

(Proceedings commenced at 9:20 a.m., and the following occurred without the presence of the jury.)

MR. DISKANT: Good morning, your Honor.

THE COURT: Good morning.

MR. DISKANT: I think we've reached a substantial number of agreements.

First, the parties have agreed on an instruction to request your Honor to give at the beginning of the testimony. I will read it to you. I've written it out as neatly as I can. I hope you can read it. The proposed curative instruction is:

In light of yesterday's testimony, I want to instruct you that there is only one infringement issue for you to decide in this case. That is the question whether the NIR stent meets the substantially uniform thickness limitation of Claim 23 of the '762 patent.

We've then agreed that Mr. Cavanaugh will ask just one question on the subject of Dr. Richter, and that question will be, in substance:

Dr. Richter, you understand that the only infringement issue in this case is whether the NIR stent

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meets the substantially uniform thickness limitation of Claim 23.

He will just say yes. He will just say yes. And we will then abandon the limitations analysis. We will just start asking him questions about the substantially uniform thickness limitation. If that's acceptable to your Honor, the parties have agreed on that.

MR. BADENOCH: That is acceptable, your Honor and, of course, we assume Mr. Cavanaugh will ask it in a non-confrontational tone.

MR. CAVANAUGH: All of Mr. Cavanaugh's questions are non-confrontational, your Honor.

MR. DISKANT: He does the best he can.

THE COURT: He does the best he can?

MR. DISKANT: That's where we are.

Secondly, I made a motion yesterday morning with respect to a host of demonstratives which BSC purported to say Claim 13 was cancelled and put in other claims and argue about other claims.

I think we have agreed largely on that subject. There are -- and most of the slides that I object to are gone.

There is a slide they wish to show, the one that has methods. Here it is.

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A purported comparison between a method claim and a device claim, which I think is --

THE COURT: I think I already have that one.

MR. DISKANT: Okay. I think that's legally incorrect and shouldn't be shown to the jury.

I also understand that while they've abandoned any effort actually to show and review other claims with the jury, they still want to say there are other claims in the patent that call for balloon. I don't think that's fair or correct. I think it's perfectly fair to say Claim 23 doesn't say a balloon. I've got no quarrel with that. When they start pointing to other claims, Claim 44 requires a balloon in which another jury found they infringe.

I don't think we should be going into other claims in the patent.

THE COURT: Mr. Badenoch?

MR. BADENOCH: Good morning, your Honor.

THE COURT: Good morning.

MR. BADENOCH: The idea of the demonstrative that counsel handed up is to try to explain it to the jury. The difference in the abstract now between a product claim and a process claim, without saying at that time, referring to any other Palmaz claim. In other words, the slides we had that compared 23 to 51.

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23 not same balloon, 51 same balloon. We agree to take that out. And the ones that said we compare Claim 23 to Claim 1 as a method in order to teach the jury that. Even though, of course, the jury does have the patent, I mean, we can't get away from it, and they have the '665 and so on.

But we won't say that, but for the jury to understand our argument here, and this, of course, is key, the claim that is in suit is a product claim with structural limitations and we want to make that vivid to the jury in the abstract, and that's what that slide is to do, is to say, look, the process -- the process, a process claim, not referring to anyone in particular, would have the steps of putting it on a balloon, inserting it and so on.

A product claim is this device, and I think that's completely fair and teaches the jury correctly what the issue is.

THE COURT: All right. Mr. Diskant?

MR. DISKANT: Well, first, I don't think this is correct.

And, secondly, I don't think it's in the abstract. It obviously demonstrates the Palmaz device and we have a product claim for use in a particular method. This is a legal instruction from an engineer.

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I don't think it's correct, and I don't think it's appropriate, and I don't think it's in the abstract.

I object to it.

THE COURT: All right. Well, I do have some concern about an engineer talking about the difference between a method claim and a device claim. I mean, it's one thing to go through the language of the claim and say this is the device. It's another thing to illustrate this.

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MR. DISKANT: Your Honor, it's just not in his expert report.

MR. BADENOCH: The demonstratives of none of the witnesses had their demonstratives in the expert report.

THE COURT: I guess it's the analysis between a method claim and device claim.

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MR. BADENOCH: Your Honor, the problem with that, of course, is, particularly with the patent experts not testifying, Dr. Buller, you see, is giving testimony about the file history and the examiner is saying none, and things like that, and so we have to allow, obviously these experts at this point have studied these patents and file wrappers intensely with the attorneys on both sides, and so what we're basically doing is giving Dr. Buller some leeway to discuss a few patent concepts. And we have to do the same thing with Mr. Snyder.

THE COURT: Right. But there's one thing, there's a difference between discussing and between illustrating and simplifying the illustrations to the point where it is not necessarily correct and it brings up issues that we more or less agree shouldn't be brought up.

So it's the demonstrative that I'm concerned about, not what your -- not with your witness saying this claim covers a device. So I am happy to have your witness say that, but I am not comfortable with this demonstrative.

MR. BADENOCH: All right, your Honor. We will take it out.

Are you saying, though, that that would be

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something that we could use in the argument?
THE COURT: Perhaps. I'm not saying that, but perhaps.
MR. BADENOCH: All right. Thank you.
Your Honor, just quickly, for the record, we want to move for JMOL of noninfringement because they have put in no evidence that the NIR stent meets the substantially uniform thickness requirement where there's a proper measurement of thickness.
Then quickly for the record, we did file a motion yesterday. We believe what has happened here, the Court, of course, ruled in limine that product-by-product comparisons were relevant to validity, secondary considerations.
And then, what counsel did, starting with the AVE case, to say, Okay, we won't charge copying and we won't charge that your stent is part of our commercial success. And, therefore, all of that stuff has to go out. That was their theory, and they did it in AVE and then they did it again.
The problem is, is that under a different terminology, they really are arguing the same thing. What they are arguing is, Dr. Palmaz gave birth to the whole industry, that all of the stents, including yours and AVE's and ACS's use a Palmaz ring. They have all

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used the basic Palmaz invention. And that is accusing us not just of infringement of Claim 23. That's accusing us of taking and appropriating Palmaz's technology, and it's saying that all of the commercial success of these stents are attributable to that.
So our position is, your Honor, that opens the door for us to discuss some of this product by-product and superior properties and project --
THE COURT: Olive. Well, Project Olive stays out. I, frankly, thought that what I was hearing from Dr. Richter on the stand was about everything you just talked about. And, frankly, when I looked at this motion on my desk last night, I thought, Oh, well, it's moot, because Dr. Richter has already talked about all of these things, except for this one project, which is still out.
So it seems to me as though --
MR. BADENOCH: The only thing, your Honor, what we tried to do with that was -- he explained the design process, but other than that, the details of product features, he was addressing the U's and the welds, and that's a separate issue, because that really is core infringement here. They are arguing that these things are trivial, no consequence. They are manufacturing artifacts.

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THE COURT: So what is it what you want to say in addition?
MR. BADENOCH: And we need to explain that they're important to the way the stent works, that this is a key point how these U's stick out, how the welds are stronger. I mean, counsel said in the opening, he basically said, Members of the jury, let me tell you their defense. It's so unbelievable, I can scarcely understand it, but here's what they are saying.
He went on. They're saying this little U and this fly spec weld and so on.
And we have to, of course, respond to that and say, no, this little fly spec weld is crucially important to the stent, and the way the U works, which does come from the manufacturing method, is crucial.
So all of that testimony is not intended to be product by-product comparison at all. It's intended to address the infringement issues.
THE COURT: All right. Well, again, I, frankly, thought that that was being covered yesterday. It seemed like an awful lot of that was covered. But if you are telling me that you held back and that there was more, maybe I need to review Dr. Richter's direct, but I thought all of that has already been --
MR. BADENOCH: Not from this witness, your

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Honor.
THE COURT: All right. Before I forget, I've got two questions about jury instructions, because we're working on them to get them out.
Number one, should we be referring to defendants collectively as BSC or Boston Scientific?
MR. BADENOCH: I think, your Honor, if we say Boston Scientific or B.S. -- the problem is all three are mentioned in the evidence.
THE COURT: Right, but I only want one. I mean, it's hard enough to read these instructions, so you pick one and I will use it.
You can confer and let me know.
MR. BADENOCH: Okay.
THE COURT: But I don't want to be saying one or two on three; I want to use one thing consistently throughout the instructions.
MR. BADENOCH: Fine, your Honor.
THE COURT: The other thing is, is, in fact, are the defendants, in fact, pursuing an anticipation defense?
MR. BADENOCH: No, your Honor.
THE COURT: All right.
MR. BADENOCH: And what we are saying is that the Ersek device is so close that the differences on a

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few points are trivial and obvious.
THE COURT: All right. Well, I'm just -- in terms of jury instructions, am I supposed to be contemplating an anticipation instruction or are we still with obviousness?
MR. BADENOCH: I think the answer is obviousness, your Honor.
THE COURT: All right.
MR. BADENOCH: We'll certainly check that and propose something if we think there's any reason for a difference.
THE COURT: All right. So do I need to review Dr. Richter's direct to see how much further it is I am going to allow you all to go?
MR. BADENOCH: No, your Honor. I think Dr. Richter's direct is finished, unless you were to change the ruling on Project Olive. But even that, I think, we could put in with deposition.
It's mostly a case of just, I think we tried to, as succinctly as we could, put the list of quotes in there where we think they opened the door. The only thing is we filed it yesterday, before the even more egregious quotes from yesterday afternoon. But --
THE COURT: Well, I guess I'm still -- it's not -- because I thought this was coming in through Dr.

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Richter, it did not occur to me that I needed to look at this that closely. I guess what I don't understand is how much further you want to go than what -- I mean, so that's where you could be helpful to me by explaining to me, and maybe I need to refer to how far that testimony went, to see where exactly you want the line drawn past that.
MR. BADENOCH: I don't think we need to do more along that line, your Honor. The main thing would be we believe we've opened the door to Project Olive here and that could come in, a short deposition testimony at the end of the day or tomorrow morning and, therefore, I don't think you need to review more testimony than that.
THE COURT: All right. Thank you very much.
Anything else before we bring our jury in?
MR. DISKANT: Just one issue. I wasn't sure I asked that Mr. Badenoch not be able to have his witness say there are other claims that have balloons and to focus his attention on the claims in suit. I don't think I heard agreement. I would appreciate it if your Honor would rule on that.
I don't think it's appropriate to tell the jury there are other claims in this patent that have balloons, that draws their attention away from the only correct analysis, which is what the scope of this

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claim is. It's perfectly fine to say this claim is a device claim that doctors can review. It's perfectly fine to say this claim doesn't require a balloon. But I don't think comparing it to other claims is appropriate.
MR. BADENOCH: It's not a comparison, your Honor. It's only to put the thing in context. One sentence. I'm sort of reminded, because I vividly remember it in the Israel case and the very last argument, when I had no chance to respond, I remember Mr. Diskant saying to the jury, they have lots of other claims, we only want you to hold this one invalid or something to this effect, or these five.
And, you know, that kind of thing clearly is unfair. But that's not what we're doing.
This is only to show the jury the difference between a product claim and a process claim, and we simply say there are other claims in the patent that require a balloon. He makes one sentence. No visuals on it, no specific comparisons. That was the plan.
MR. DISKANT: This is just a reprise of there's only one claim at issue theme, which your Honor has ordered them to stop doing. I don't think it's fair.
THE COURT: I'm having trouble hearing you, Mr. Diskant.

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MR. DISKANT: I'm sorry. I think this is just a reprise of there's only one claim in issue theme, which your Honor has directed them not to do and which we've asked for an instruction and final instructions on. I don't think it's appropriate.
MR. BADENOCH: I'm sorry, your Honor. The fact that there's only one claim in issue, we're not going to make comparisons and we're not going to suggest anything speculative about the other claims, but the jury has a patent. It's got 50 claims in it. They are going to read it. We have to say the only claim for you to decide, the only claim in issue is Claim 23, just like we have to say the only issue for you to decide is substantially uniform thickness on infringement. We have to say that. Otherwise, the jury does not get what the issue is.
THE COURT: Well, I mean, that is the case, there's only one claim and there's only one infringement issue in connection with that claim. It seems to me as though that's a fair context to put this case in.
MR. BADENOCH: Thank you, your Honor.
THE COURT: All right. Let's bring our jury in.
Now, should I be giving this instruction right away?

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Did you give that testimony?
A. I gave that testimony.
Q. Thank you.
A. I don't think that totally characterizes the reason.
Q. Okay. Nobody in 1985 knew that Palmaz was the inventor of the balloon expandable stent, did they?
A. 1985?
Q. Before -- before he invented -- before --
A. Well, that depends on what they gathered from the abstract.
Q. That's exactly right. You've made a bunch of assumptions about what is in this little abstract; right?
A. I don't think so, no.
Q. Okay. We can agree, as Dr. Palmaz has written in DX-17020 that Charles Dotter first described intravascular stenting at a time when percutaneous angioplasty was not even introduced. Unlike Dotter, most authors of original stent concepts conceived these ideas -- let me pause on the first sentence.
Dotter invented intravascular stenting at a time when percutaneous angioplasty was not introduced. As a consequence, Dotter couldn't be trying the, the original Dotter anyway, could not have been trying to improve on angioplasty. It didn't exist; right?
A. I see that, yes.

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Q. Okay. And then Palmaz writes, unlike Dotter, most authors of original stent concepts conceived these ideas as a way to overcome the limitations of balloon angioplasty.
And that's correct; right, sir?
A. Well, that's what Palmaz says. I'm not going to quarrel with him.
Q. Okay. And what that means is that all the people who were working on the self-expanding stents, the coil stents, the spring stents, the Z stents, were all trying to overcome the limitations of balloon angioplasty; right?
Is that true or not true or you don't know?
A. Palmaz says that was most people's intent in his opinion, yes.
Q. Okay. And you gave some testimony that the Z stent -- you focused on the -- actually, let me ask first, we can agree that, although you interpreted the paragraph, it doesn't say anything in the paragraph in words about controllable expansion; right? Those words aren't in the paragraph, are they?
A. No. I think -- I mean, I think if you really look at this carefully and try to replicate what he describes, you're going to come upon it. But he doesn't say it explicitly.

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Q. He also doesn't say anything about a plastic deformation in the paragraph, does he?
A. I think --
Q. Doctor, please answer my question.
A. He doesn't say explicitly.
Q. Does he say anything about a wall surface of substantially uniform thickness? Yes or no?
A. No.
Q. Yes or no?
A. No. He describes a wall surface of not uniform thickness.
Q. And he doesn't say anything about longitudinal slots, does he?
A. Not directly. Again, if you --
Q. Doctor --
A. -- follow what he says, you'd see it.
Q. He doesn't say -- it doesn't say anything about smooth surface; right? Does it?
A. No.
Q. Okay. Now, you've testified that -- you focused on one sentence here and said the dilatation and simultaneous placement and you said the Gianturco Z stent wasn't strong enough to do that.
Did I hear you give that testimony? Yes or no?

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A. I said -- what I said was that it wasn't strong enough to break plaque without being so strong that it would injure the vessel. That's what I said.
Q. Yes, because the truth is, Doctor, that the expansile force of assessment stent design can be increased dramatically simply by shortening the length of the zig-zag pattern. Is that true or not? Please. Can you answer?
A. That's true, but --
Q. Thank you.
A. -- it would then be inappropriate for use.
Q. That's exactly right. The question is you've got to find the right expansile force so it explodes with enough pressure to expand the vessel, but not so much that it injuries the body. Isn't that the problem with the Z stents? Yes or no?
A. I don't think the Z stents are used that way or intended to be used that way.
Q. Beyond the Z stents, I didn't notice you talking about Dotter's later memory metal coil, not that there's prior art, which was simultaneously placed and expanded to expand a lesion; isn't that true, sir?
A. I didn't bother with that because Dr. Palmaz said that his device was stainless steel and there is no such thing as stainless steel memory metal.

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Q. Okay. Let's just assume with me, just for purposes of moving this along, that the description is a tad obscure to the ordinary person. Okay?
A. What description is that?
Q. The description in the one paragraph in the program for the radiology meeting. Okay?
A. Okay.
Q. Okay. Let's talk about Ersek.
You have read the Ersek patent more than once. Is that fair?
A. I've read it through, sure.
Q. Sure.
We can agree that the Ersek design was a fixation device for use during surgery; is that right?
A. Correct. His intended use was during surgery.
Q. Okay. And surgery, of course, is the procedure in which the body cavity is opened and a conventional operation ensues; right?
A. You've described conventional open surgery.
Q. Okay. And we can agree that that is exactly what Dr. Palmaz was trying to avoid; correct?
A. That's correct.
Q. Okay. And, in particular, what Ersek was interested in was replacing stitches. Is that fair?
A. Again, you're -- you're confusing process with

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product, I think.
Q. Doctor, I'm asking you about the Ersek patent. Can I ask you about that?
A. He's talking about making connection. That is conventionally done with stitches.
Q. Okay. In stitching, a needle and thread goes through the body tissue and the surgeon, during an open procedure, stitches together whatever he is stitching together; right?
A. Correct.
Q. And Ersek thought that that took a long time and his fixation sleeve would be faster and better; right?
A. I think he only claims faster.
Q. Okay. You're right.
And, of course, the Ersek fixation sleeve was never used or made commercially; is that correct? Never made commercially; is that true?
A. That's true. The --
Q. Thank you.
A. I don't know if the Palmaz version was ever commercial. I don't think so.
There are devices of this kind today.
Q. Well, what there are are surgical clip appliers have replaced stitches in many uses; is that true?
A. That's different from this.

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Q. Doctor, is it true that surgical clip appliers have replaced stitches in many uses?
A. In some applications.
Q. Okay. Doctor, please let me ask my questions.
A. No.
MR. DISKANT: Your Honor --
THE WITNESS: I need to change my answer because a clip applier is different. Clip appliers are not replacements for stitches ordinarily.
BY MR. DISKANT:
Q. A clip applier, a gun-like device has a row of staples, and the surgeon, instead of stitching, uses the clips that are between little jaws and the clip applier goes squeeze and squeezes the staple shut during the surgical procedure; isn't that how it works?
A. No. That's wrong. You're mixing up what surgeons call clips and clip appliers, which are used to occlude vessels that you've cut and just want to seal off. You're confusing them with staplers, which are used to join two pieces together.
Q. Okay. Let's agree on terminology, then. You want to call these staples.
Surgical staplers are used instead of stitching, a device in which little staples go between the jaws and are clipped, staple things together or clip

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them together as a replacement for sutures; correct?
A. They kind of pinched them together instead of passing thread through.
Q. Okay.
A. Correct.
Q. And that's the art form in which Ersek is trying to come up with an idea; right? Replacing stitching; correct? True or false?
A. Right. He's not making staples. He's replacing stitches.
Q. Okay. And you gave some testimony about expanded metal. And you put a brochure of some expanded metal into evidence. Do you remember that?
A. Yes.
Q. The truth is, there's all kinds of grades and kinds of expanded metal; right?
A. Yes.
Q. Okay. And so the important thing -- first of all, let's just make sure we all understand what expanded metal looks like and this is the kind of expanded metal you might get at the hardware store, but it's big so everyone can see it.
PX-7686.
Would you agree that this is a conventional; piece of expanded metal (handing exhibit to the witness)?

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A. Yes. A stent made by the teachings of Ersek, yes.
Q. And so that we're clear, the experiment was the idea of BSC lawyers, not you; right?
A. They thought it would be appropriate to test the workability.
Q. Sure.
A. Yes.
Q. So one of counsel told you that this model has been made and you went and observed it; right?
A. I observed the construction of the stents.
Q. Right. You didn't make it. The BSC engineers made it; right?
A. I don't remember if I helped line those joints up.
Q. Okay. Maybe.
And the stents that you made based on expanded metal, after they were made, they were crimped on a balloon and flattened?
A. They were pushed down on a balloon and --
Q. Doctor, they were flattened; is that right? Yes or no?
A. You're -- you're characterizing it as an intent. What we found was that when we crimped it, they smashed down.
Q. Doctor, Doctor, reduction on the mandrel resulted in substantial flattening, particularly in the bond

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areas; correct?
A. Right.
Q. Thank you.
A. It resulted in flattening. It's not that it was set out to flatten them.
Q. Of course, flattening is the opposite of what Ersek talks about as preferred; right?
A. It's --
Q. Is it or is it not?
A. It's different from the preference.
Q. Okay. And, indeed, the Patent Office, when it considered this question, included that the bridge of the expanded metal has a thickness twice as great as the strand. The outside of the Ersek device is a multitude of these obstacles, making it rough rather than smooth. And, further, making the outside of the Ersek device smooth rather than rough would be contrary to the teachings of Ersek, since the rough surface formed by narrow outwardly projecting edges is intended to imbed itself into the tissue wall upon expansion.
That's what the Patent Office concluded; is that correct, sir?
A. This is --
Q. Doctor, Doctor, is that what the Patent Office, the United States -- of the United States concluded? Yes or

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no? It's not a trick question.
A. Yes.
Q. Thank you.
A. As a result of Dr. Andros' declaration that the examiner is not at liberty to ignore.
Q. Right. And Dr. Andros' declaration was substantially identical to the testimony of Dr. Buller in this courtroom, wasn't it?
A. All I heard was Dr. Buller saying he agreed.
Q. Okay. Let's talk about what Ersek said he was doing. One of the things, and the impact of what he said he was doing on one of ordinary skill.
Ersek had essentially two specific disclosures in his patent. We just looked at them. One was to implant a heart valve; correct?
A. Right. One was the valve.
Q. And there was a design from 1970 or thereabouts; right?
A. Right.
Q. And you are familiar in your professional life with heart valves; right?
A. Yes.
Q. You've published on the subject; right?
A. A long time ago, yes.
Q. Some from the eighties and nineties. You published

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as recently as 1998, you've written on the dynamics of prosthetic heart valves; right?
A. Yes. I helped somebody with instrumentation.
Q. It's on your C.V.
Now, after Ersek did his work, but before the Palmaz invention, there was a very significant event in the heart valve industry that had a profound effect on all implantable medical devices. The Shiley failure; right?
A. It had a big effect on how the FDA considers medical devices.
Q. Right.
And Dr. Palmaz has even written about it. This is DX-15020.
What he wrote was the mechanical performance of an implanted device must also be evaluated carefully under chronic exposure to a certain workload. Concern about the long-term endurance of modern cardiac valves. That's a heart valve; right? Cardiac valve means a heart valve?
A. Yes.
Q. Concern over the long-term endurance of modern cardiac valves underscores the importance of this subject, he wrote. As the strut, as with the struts of a cardiac valve, Dr. Palmaz wrote, a stent implanted

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in an artery of a middle-aged patient must endure 1.5 to 2 billion pulsations and still perform without failure.

You agree with that, don't you?

A. What --

Q. Doctor, do you agree with that or no? Yes or no?

A. I agree with it, but I understand that the valve was made up of entirely different material than is ever contemplated for a stent.

Q. Okay.

A. So I don't see the relevance.

Q. Okay.

A. I don't share Dr. Palmaz's reading --

Q. I understand, but you didn't invent the balloon expandable stent either, did you? I withdraw that question. I apologize.

Let's just talk about the Shiley story, so the jury understands. You probably teach your students about it, don't you?

A. I don't cover that.

Q. Someone else covers Shiley in your course materials? Got to be taught; right?

A. We -- whether we do regulatory, we cover current regulatory practices that people have to know about.

Q. The Shiley heart valve was first introduced in the

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late 1970's and it was hailed as an advance in mechanical heart prosthetics; is that right?

A. It may have been. It was one of many, became relatively popular.

Q. It became notable when it killed more people than any device in modern medical history. Is that fair?

A. Certain sizes of the valves, the largest two sizes, occasionally broke. Unfortunately, by that time, there were -- they were in a lot of people. When they failed, a lot of people died.

Q. Basically, what you are talking about is inside the beating heart there's a lot of stress on a mechanical device; right?

A. Right. Shiley had chosen for the device for particularly brittle material called Stellite, which was subject to stress failure.

Q. Sure. And between 1979 and 1983, the struts that held the valve in place fractured in 73 people, most of whom died. Is that fair?

A. I don't remember the numbers, but that sounds --

Q. Okay. Of the 86,000 patients who received the device during its total time on the market, 400 died. Is that fair?

A. You said there were 76 strut fractures?

Q. No. Between '79 and '83. 400 comes from the FDA website. Will you accept that?

A. Are you saying 400 died due to strut --

Q. Yes. Between '79 and '83. Now I'm talking about the entire 86,000 patients who had it during its entire time on the market through 1986.

A. If you are representing there were 400 strut fractures, I believe that.

Q. Okay. Another 200 survived, but only after emergency open-heart surgery, they survived fractures. Is that fair?

A. That's what would happen.

Q. You don't disagree with me that the Shiley heart valve has killed more people than any other medical device in history?

A. That may be true.

Q. Between 1979 and 1985 --

A. I -- I -- I don't know if that's true.

Q. Okay.

A. I think you'd have to qualify that by saying --

Q. Do you know Dr. Henry Peeler?

THE COURT: Mr. Diskant, you do need to let the witness complete his response.

MR. DISKANT: I'm sorry.

THE WITNESS: That's a pretty broad statement and, unfortunately, there are failures of

Page 1(

medical devices.

BY MR. DISKANT:

Q. Okay.

A. And if you are including ventilators that fail and heart/lung machines and oxygenators and all of these devices, I don't know. If you are saying implantable medical devices, I think that would be true.

Q. Okay. That's fair.

Between 1979 and 1985, Shiley sent a series of letters to the medical community about the fractures. Is that fair?

A. I wasn't there, but I suppose that would have been the case.

Q. And during those years, it was twice withdrawn for fears about its safety and then put back on the market. Is that true?

A. I don't recall that one way or the other.

Q. October 1985, Shiley finally ceased producing its larger-sized valves. Is that fair?

A. That's 29 and 31.

Q. Yes. In 1986, the FDA finally demanded the removal of the device from the market. Is that fair?

A. I will take your representation.

Q. Okay.

A. Sounds right.

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Q. Is it fair to say, Doctor, that the Shiley failure had a profound effect on scientists who were thinking about putting metal in the coronary arteries in the mid-1980s?

Yes or no?

- - -

A. No. It had a profound effect on people's design, treatment of materials, selection of material, quality assurance, depth of testing that goes into regulatory, but it had no effect whatsoever on contemplation of putting metal in vessels.

- - -

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A. (Continuing) Every other heart valve on the market that was a mechanical valve had a metal rings.
Q. You remember, Doctor, that one of the people that Dr. Palmaz went to to try to interest them in his slotted tube balloon expandable stent was Shiley?
A. Right. A little off base for them, but, yeah.
Q. I'm sorry. Shiley, February 1983, right in the middle of the problem. True?
A. Right. So he's asking a company kind of on its heels to invest a lot of money.
Q. Right. Here's what Shiley said in 1983: It is apparent that your concept provides a unique method for mechanically arresting the inherent elastic recoil of vessels subjected to PTA. But the disadvantage would be the necessity of leaving a prosthetic material in place following the procedure. We feel this disadvantage would outweigh the possible advantages of the advice and have therefore decided not to pursue your concept, Shiley wrote; right?
A. Well, yes. Their concern, as has been discussed, was that the device would thrombus.
Q. Sure.
A. Nothing to do with fracture.
Q. Okay.

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A. Doesn't say anything.
Q. You're sure in 1985 it would have been obvious to take Ersek and make it little and make it smooth and make it small and put it on a balloon and leave it in someone's heart? Is that your testimony?
A. None of that is in Claim 23, so I didn't give an opinion on that.
Q. Okay. Lastly, sir, you were required to consider our so-called secondary factors; correct?
A. Yes.
Q. And you gave some testimony about that today; right?
A. Yes.
Q. At your deposition you testified you didn't recall any secondary considerations that you had actually reviewed. Is that fair?
A. That's not exactly true, no.
Q. And you didn't consider any commercial success or any long-felt need or any recognition by the industry or licenses at your deposition; is that fair?
A. I think those were aspects of secondary factors that I said I had not considered, yes.
Q. Okay. Let me show you 7608, which I've marked for identification (handing exhibit to the witness).

And we're talking about Claim 23, the claim that requires a tubular member with longitudinal slots

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and a first diameter for intraluminal delivery and a second expandable and controllable diameter. Okay? That's what my question is about.

We can agree that Claim 23 describes the Palmaz stent that Dr. Palmaz designed; correct?
A. It describes this tube, yes.
Q. Describes the Palmaz stent that Dr. Palmaz described that was sold commercially by Johnson & Johnson. True?
A. Commercially, the tube was not sold by itself. It was sold on a balloon in the hundreds, as far as I know.
Q. Talking about the Palmaz stent that Johnson & Johnson packaged on a catheter in an angioplasty balloon and sold in America as the Palmaz peripheral stent; right?
A. Yes. Stent 1 balloon.
Q. Did you consider in your obviousness analysis the report that the historic Palmaz stent was displayed at the Smithsonian?
A. No. It's a wonderful testament to somebody who worked so hard.
Q. It's just a testament to his enthusiasm. Is that fair?
A. Enthusiasm, hard work, refusal to give up, yeah.
Q. Okay. Did you consider the world's most successful

Exhibit QQ

- VOLUME A -
IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION, Plaintiff vs. MEDTRONIC AVE, INC., BOSTON SCIENTIFIC CORPORATION and SCIMED LIFE SYSTEMS, INC., Defendants — CIVIL ACTION, NO. 97-550 (SLR)

BOSTON SCIENTIFIC CORPORATION and SCIMED LIFE SYSTEMS, INC., Plaintiffs vs. ETHICON, INC., CORDIS CORP. and JOHNSON & JOHNSON INTERVENTIONAL SYSTEMS CO., Defendants — CIVIL ACTION, NO. 98-19 (SLR)

CORDIS CORPORATION, Plaintiff vs. MEDTRONIC AVE, INC., BOSTON SCIENTIFIC CORPORATION and SCIMED LIFE SYSTEMS, INC., Defendants — CIVIL ACTION, NO. 98-197 (SLR)

Wilmington, Delaware
Thursday, March 17, 2005
9:35 o'clock, a.m.

BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury

Valerie J. Gunning and
Leonard A. Dibbs,
Official Court Reporters

APPEARANCES:

ASHBY & GEDDES
BY: STEVEN J. BALICK, ESQ.

-and-

PATTERSON, BELKNAP, WEBB & TYLER LLP
BY: GREGORY L. DISKANT, ESQ.,
EUGENE M. GELERNTER, ESQ.,
WILLIAM F. CAVANAUGH, JR., ESQ.,
MICHAEL TIMMONS, ESQ. and
SCOTT HOWARD, ESQ.
(New York, New York)

-and-

JOHNSON & JOHNSON
BY: ERIC I HARRIS, ESQ.

Counsel for Cordis Corporation

YOUNG, CONAWAY, STARGATT & TAYLOR
BY: JOSY W. INGERSOLL, ESQ.

-and-

KENYON & KENYON
BY: GEORGE BADENOCH, ESQ.,
MARK CHAPMAN, ESQ. and
WALTER HANLEY, ESQ.
(New York, New York)

Counsel for Boston Scientific Corporation

PROCEEDINGS

(Proceedings commenced at 9:35 a.m.)

THE COURT: Good morning, counsel.

(Counsel respond "Good morning, your Honor.")

THE COURT: Deja vu all over again.

We see jurors in the back. So, as soon as they're kind of gathered, we'll bring them in. I understand that there are no issues, problems before jury selection, so we'll just go forward.

MR. BADENOCH: Your Honor, one --

THE COURT: Yes?

MR. BADENOCH: -- noncontroversial on the voir dire. Albert Brenneisen is not here. Walt Hanley is. So on Page 6, when you read counsel...

THE COURT: Well, I don't generally read. They have the list. So I can add that name.

Let me just make sure I have it right. H-a-n-l-e-y?

MR. HANLEY: Correct, your Honor.

THE COURT: All right.

(At this point the prospective jurors were brought into the courtroom.)

THE COURT: Good morning, ladies and gentlemen. I'm Judge Robinson and I will be presiding over a trial for which a jury is about to be drawn in the case captioned Cordis Corporation versus Boston Scientific Corporation, et al. Briefly stated, this is a patent action, arising under the patent laws of the United States, involving stents, which are medical devices implanted in arteries.

The trial will last five days. I time my trials so the attorneys have to complete their trial presentations within these limits. However, jury deliberations may require you to be present longer than five days.

Our trial days will run approximately from 9:30 a.m. to 4:30 p.m.

In light of this brief summary, I'm going to ask you certain questions, the purpose of which is to, one, enable the Court to determine whether any prospective juror should be excused for cause and, two, to enable counsel for the parties to exercise their individual judgment with respect to peremptory challenges, that is challenges for which no reason need be given by counsel.

If any of you answer any question yes, please stand up and, upon being recognized by the Court, state your juror number.

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that I have no opinion about that because I am not here to testify and not an expert on Claim 23.
Q. Okay. You also testified during your direct testimony about the BX Velocity stent?
A. Yes.
Q. Which you and your family designed or helped design?
A. Yes.
Q. Okay. And that was a very successful stent; right?
A. Yes.
Q. And do you agree with me that the BX Velocity stent is more flexible than the Palmaz/Schatz stent was?
A. I think that the BX Velocity is, you know, sort of a third-generation stent. Stents got better. We all used Dr. Palmaz's basic invention and, as smart people hopefully will do, I'm not sure I'm one, but smart people will improve upon what a pioneer does and make them better. We're still not driving model T's. We're driving better cars than that. But Henry Ford still invented the internal combustion engine. I think we should keep that in mind. People improve what Dr. Palmaz invented, which is pioneering. That does not mean that what he invented is not incredibly valuable and actually, as I showed, that Palmaz slot is still

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in the BX Velocity, that critical building block. That was the critical invention.
Q. I think you went a little beyond my question, which is: Is the BX Velocity stent more --
A. Yes.
Q. Is it more flexible and easier to deliver than the Palmaz/Schatz stent?
A. Yes.
Q. And therefore, do you agree with me that at least part of the success of the BX Velocity stent in the marketplace had to do with the fact that it was more flexible and easier to deliver than the Palmaz/Schatz?
A. Yes.
A. We improved upon the Palmaz/Schatz design, made it more flexible. That allowed it to be more deliverable and improved on its success.
Q. I want to talk about the Cipher stent next, which as I understand it is a BX Velocity stent that's got a drug coating on it?
A. That's correct.
Q. So the structure is the same? The structure of the stent?
A. As the BX Velocity?
Q. Yes.
A. Yes.

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Q. Okay. So I assume that it also is more flexible and easier to deliver than the Palmaz/Schatz stent for the same reasons you just gave?
A. Yes.
Q. Okay. And it has this additional feature, which is the drug coating; correct?
A. Yes.
Q. And that, as I understand it, releases a drug after the stent is implanted to prevent or retard the tissue growth that causes restenosis?
A. Yes.
Q. Okay. And as a result, isn't it true that the Cipher stent has much lower restenosis rates than the bare metal BX Velocity stent?
A. Has much lower restenosis than any bare metal stent in the history of the world. Really low and the drug is very effective.
Q. So do you agree with me, then, that the success of the Cipher stent is overwhelmingly due to the drug coating which lowers restenosis?
A. There's no question that drug-eluting stents have become very successful because, you know, it's probably the next big stent. But in some ways continued evolution, again, you know, now we have a V12 instead of a V4 engine.

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It's still a better balloon expandable stent. You know, we put a drug on it now. Some day we'll do other things to make it even better. But it's still all leveraging off of Dr. Palmaz's slotted design.
Q. But I think there was a yes in there, but don't you -- do you agree with me that the success of the BX Velocity -- I'm sorry. The success of the Cipher stent as compared to the success of the BX Velocity stent has to do with the reduced restenosis rates that you get with the drug coating?
A. Yes, that has really helped with the success and the widespread acceptance of that stent.
Q. Okay. And, again, Dr. Palmaz did not make that contribution; correct?
A. That's correct.
Q. Okay. I think during your direct testimony that you just testified that the standard of care today is a balloon expandable stent. Is that what you testified to?
A. For the treatment of an obstructive or coronary artery that's causing problems, the standard of care today in my opinion is the treatment with not only a stent, drug balloon expandable stent.
Q. Isn't the standard of care today really the use of a drug-eluting balloon expandable stent?
A. My opinion, they're better than the bare metal

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stents and that has become the standard of care, using a balloon expandable drug-eluting stents.
Q. Okay. You also testified during your direct testimony about the Stress and Benestent clinical trials that were published in 1994?
A. Correct.
Q. And I think you also testified about how before those results were published, the medical community was somewhat skeptical about the idea of stents?
A. Yes. I didn't say much about that during my direct testimony, but I think that's true. That is, there was a lot of skepticism about putting a piece of metal inside an artery, a thought that it would cause a very high rate of clotting that would be unacceptable and that it would be too dangerous.
Q. So the skepticism was due to the fact that people were concerned about leaving metal in an artery, exposing it to the blood, and that would cause a blood clot; right?
A. And that really came out of the self-expanding stent trials that preceded Stress and Benestent with the Snyder stent, which had a very high rate of stent clotting. Once we put it on the balloon and expanded it properly into the wall, the rate of clotting became acceptable. So once again, the concept of balloon

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expansion of the stent not only improved the deployment, made bigger holes, prevented the reblockage, but also improved the safety of the device, it appeared.
Q. But weren't people skeptical about using balloon expandable stents, not just self-expanding stents, but balloon expandable stents in arteries?
A. They were until the Stress and Benestent trial proved that balloon expansion of a deformable piece of steel into the wall was a good idea. Until then, people did not think it was a good idea. And that in large part was due to very bad experiences with self-expanding stents.
Q. But Stress and Benestent did not overcome the problem of thrombosis, did it?
A. We still have not overcome the problem of thrombosis. The most recent drug-eluting trial stent with thrombosis, 2 percent had clotted the Taxus stent.
Q. The problem with thrombosis is as bad today as it was in 1994?
A. Almost as bad with the Taxus stent. Not as bad with Johnson & Johnson.
Q. At the time because of this concern about thrombosis, isn't it true that stent patients had to receive very, very aggressive anticoagulation drugs?
A. They had to receive Coumadin and aspirin and Persantin, typically. Those are three drugs. Coumadin

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is given to about four million Americans every year. It's one of the most widely prescribed drugs in the United States. And, yes, you could call it aggressive. It was used for a month or two.
And that, with aspirin, which is continued indefinitely for everyone has coronary artery disease essentially. So it was somewhat aggressive and some people had bleeding, but that combination was reasonably effective in reducing the stent clotting.
Q. But as a result of the drugs, I think you alluded to this in your answer, didn't that cause a lot of bleeding and vascular complications in patients who received stents and patients who received balloon angioplasty didn't have to receive those drugs, so they didn't suffer those complications?
A. In the early days of stenting, back in 1994/95, before we began to optimize some of those regimens, and had better drugs and better regimens for deploying stents, we had higher bleeding rates in the stent patients than we had in balloon patients. Most of those were minor bleeding in the leg but, yes, that was one of the original problems with pretty aggressive blood thinning at the time the stent was put in in 1994.
Q. And as a result of that, didn't people who received stents at that time tend to have to stay in

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the hospital longer than people who just received balloon angioplasty?
A. In general, they would stay in two or three days because they had to get on the Coumadin, and that takes about three days to really kick in for the blood thing of the Coumadin to work. So we'd usually keep them in the hospital for two or three days while the blood thing was coming into effect to make sure they were safe and that their stent stayed open.
Q. And isn't it true that that problem was only solved after Stress and Benestent by Dr. Columbo?
A. I would say that Dr. Columbo, who, you know, he made the observation that using higher pressure to stretch the stent into the wall allowed you to have a lower risk of stent clotting, and also then better drugs came along. The combination of those two things allowed us to begin to back off on the blood thing and discharge patients the next morning, which is what we do today.
Q. And so Dr. Columbo's contribution was to show that if you used high-pressure balloons to expand the stent more fully into the wall, the thrombosis problem wouldn't happen in the first place, so you didn't need to use the harsh drugs; right?
A. He showed that it was important to stretch the

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Palmaz stent into the wall firmly. That was an important observation that Dr. Columbo made and it helped us. We learned that when the stent wasn't totally touching the wall, that was one of the predictors of stent clotting, and whether we were taught by Dr. Columbo that pushing it into the wall a little harder made the stent clotting rate lower, we then were able to back off a little bit on the blood thinners and still have very good results.

Q. And once you backed off the blood thinners, the vascular and bleeding complications were reduced and the hospital stays got shorter; right?

A. Everything got better. The evolution, like most medical technologies, is we evolved it. Smart people made contributions in how to further improve the treatment and we did. We got better at it, better at putting them in. We eventually got maybe a little bit better stents, a little easier to deliver, as you suggested.

And this was, don't forget, ten years ago we had this, and medical progress is swift.

Q. And this advance and contribution that you just described was Dr. Columbo's continue contribution, not Dr. Palmaz's contribution; is that right?

A. He couldn't have done it without Dr. Palmaz's

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stent because that was the one he used to do his studies. But, yes, he made an observation with Dr. Palmaz's stent and figured out some ways to put them in better than we did in Stress and Benestent. You know, he improved upon our ability to put the stents in properly.

Q. I want to go back to the Palmaz/Schatz stent when it was launched in 1994. In 1994 until 1997, didn't Cordis essentially have the coronary market to itself because the Palmaz/Schatz stent was the only stent approved for general use?

A. I don't remember the exact dates, but something like that time frame. The only -- there was one other stent on the market at the time, which was a coil stent, which didn't have the features that Dr. Palmaz invented, and that, the Cook stent had very bad long-term results. So it really took that strong, you know, expandable slot to give the kind of results that we saw in Stress and Benestent.

So the other stent on the market from Cook, which was available, was pretty quickly recognized as not having the beneficial effect that Dr. Palmaz's stent had.

So because of that, even though there were two stents in the market, everyone was pretty much using the Palmaz, because it was the best stent.

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Q. Well, the other stent you're referring to, the one by Gianturco, that wasn't approved for general use, was it?

A. It was approved for coronary use. It was supposed to be used if you got a bad balloon result. Of course, as already suggested, on label. Off label use does not stop doctors if they think they have better advice, they'll use it.

So the doctors voted by using the Palmaz, having both available on the shelves. If they really thought that the Cook stent was better, they would have used it even though it was only approved for fixing bad balloon results, not for preventing restenosis. It wasn't approved for preventing restenosis because it didn't.

Q. But isn't it true that the Cook stent was only approved for a very narrow group of cases where you had a dissection or some other abrupt event whereas the Palmaz/Schatz was approved for general coronary use?

A. I think I just said the Cook stent was approved for fixing a -- that tear we showed in the video. The Cook stent was approved for that. They did a study. I was in the study, to try to prove that it was better than a balloon to prevent reblockage and it wasn't. And the doctors knew it. So they didn't use it, because the

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Palmaz was the only one that improved the long-term results.

So it was, even though it was only technically labeled for fixing torn vessels from balloons, as I already alluded to, almost every vessel is torn by balloons. You could have used it if you wanted, but it wasn't as good a stent.

Q. Anyway, between '94 and '97, Cordis essentially has the market to itself and then other companies, like Boston Scientific, introduce more flexible stents; right?

A. They introduced -- they bought Medinol or did a marketing arrangement with Medinol and introduced, I guess in 1998, the Nir stent.

Q. And other companies also introduced more flexible stents?

A. Guidant introduced a stent called the Multi-Link stent, which was again sort of a second-generation stent that used Palmaz structures and was more flexible and was very widely and quickly adopted. It was a second-generation. They said, Hey, we can do better, make it a little more flexible, maybe. We see Dr. Palmaz's piece in there. We can maybe tweak that, make it a little better and sell a lot of stents. Very competitive market.

Q. And I think you just mentioned that the Nir stents

Exhibit

RR

Johnson & Johnson

INTERVENTIONAL SYSTEMS CO.

September 1, 1995

Mr. W.D. Dearstyne
to
Mr. J.T. Lenehan
to
Mr. C.H. Johnson
to
Executive Committee

PROJECT OLIVE

This recommends an agreement with Cardimed in Tel Aviv, Israel for the rights to the NIR Stent that consists of a $105MM license for worldwide marketing rights and an option to buy the patents and technology after a series of milestone payments of $230MM have been paid within one year of the signing of this agreement making the total acquisition $335MM. JJIS needs to proceed with this agreement immediately to prevent this very competitive and valuable stent design from being acquired by Boston Scientific or going public at a valuation between $450-500MM. The following strategic business reasons drive the need for this acquisition:

A. The NIR Stent design is a superior stent design for both coronary and peripheral applications and has the potential to substantially replace the PALMAZ and PALMAZ-SCHATZ Stent due to these unique features:

1. Flexible delivery, yet, very strong after deployment. The flexibility aspect of the NIR Stent is a substantial competitive advantage over the current PALMAZ and PALMAZ-SCHATZ Stents and is a feature which can potentially replace up to 50% of our current stent volume based on indicated physician preference and limited clinical results.

2. Accelerates JJIS expansion into two major stent segments in which we are unable to participate due to the inherent stiff design of the PALMAZ and PALMAZ-SCHATZ Stents:

   a. Multi-vessel/extensive disease in patients. The unique flexibility and strength of the NIR Stent will increase stent penetration into this important and large segment of the stent market - potential estimated to be over 100,000 procedures ($160MM) per year worldwide. This will permit stenting of patients who would normally be sent to open heart surgery. This is a major opportunity for JJIS.

b. <3mm Vessels - The NIR Stent's unique design is ideal for stenting <3mm vessels and will permit more rapid penetration of this untapped large segment estimated to be 200,000 procedures ($320MM) per year worldwide.

3. Longer Stent Design - The NIR Stent design permits longer stents which will help reduce hospital/ procedure costs. JJIS needs longer, flexible stents to effectively compete against the multiple new stent products rapidly being introduced in Europe and other key markets. We cannot compete effectively, long term, with the current PALMAZ and PALMAZ-SCHATZ Stent design.

4. Sheathless Delivery - The NIR Stent design will permit a sheathless delivery, hence, minimizing the invasive nature of the stent procedures. This will reduce the incidence of bleeding at the puncture site, shorten hospital stays and permit safer delivery of the stent.

5. Higher Peripheral Penetration Rates - Due to the much easier/user friendly characteristics of the NIR Stent, we anticipate higher penetration rates into the current peripheral stent markets.

6. Deflect Competitive Claims of Flexibility - All competitive stents have a strong flexibility claim versus the PALMAZ and PALMAZ-SCHATZ Stents. The NIR Stent will match or exceed the flexibility performance of competitors and provide superior strength following deployment.

7. Lower Manufacturing Costs - The automated manufacturing and inspection method for the NIR Stent utilizes high-tech, integrated circuit technology and increases the precision of manufacturing. We anticipate it will lead to lower manufacturing costs.

In summary, this acquisition is necessary to perpetuate the stent franchise for Johnson & Johnson while protecting and building upon our worldwide leadership position.

M.L. Woodall

Exhibit SS

- VOLUME B -
IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION, Plaintiff : CIVIL ACTION
vs. :
MEDTRONIC AVE, INC., BOSTON SCIENTIFIC CORPORATION and SCIMED LIFE SYSTEMS, INC., Defendants : NO. 97-550 (SLR)

BOSTON SCIENTIFIC CORPORATION and SCIMEO LIFE SYSTEMS, INC., Plaintiffs : CIVIL ACTION
vs. :
ETHICON, INC., CORDIS CORP. and JOHNSON & JOHNSON INTERVENTIONAL SYSTEMS CO., Defendants : NO. 98-19 (SLR)

CORDIS CORPORATION, Plaintiff : CIVIL ACTION
vs. :
MEDTRONIC AVE, INC., BOSTON SCIENTIFIC CORPORATION and SCIMED LIFE SYSTEMS, INC., Defendants : NO. 98-197 (SLR)

Wilmington, Delaware
Friday, March 18, 2005
9:08 o'clock, a.m.

BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury

Valerie J. Gunning and
Leonard A. Dibbs,
Official Court Reporters

APPEARANCES:

ASHBY & GEDDES
BY: STEVEN J. BALICK, ESQ.

-and-

PATTERSON, BELKNAP, WEBB & TYLER LLP
BY: GREGORY L. DISKANT, ESQ.,
EUGENE M. GELERNTER, ESQ.,
WILLIAM F. CAVANAUGH, JR., ESQ.,
MICHAEL TIMMONS, ESQ. and
SCOTT HOWARD, ESQ.
(New York, New York)

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JOHNSON & JOHNSON
BY: ERIC I. HARRIS, ESQ.

Counsel for Cordis Corporation

YOUNG, CONAWAY, STARGATT & TAYLOR
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KENYON & KENYON
BY: GEORGE BADENOCH, ESQ.,
MARK CHAPMAN, ESQ. and
WALTER HANLEY, ESQ.
(New York, New York)

Counsel for Boston Scientific Corporation

PROCEEDINGS

(Proceedings commenced at 9:08 a.m.)

THE COURT: I understand we have issues.

MR. BADENOCH: Good morning, your Honor.

THE COURT: Good morning.

MR. BADENOCH: To do this before the jury comes in, I just -- I understand of course the Court's ruling yesterday and we respect that, but I did for our record want to offer the exhibits that I referred to and I understand counsel is going to object.

And for the record, I will just recite what those were. They are Plaintiff's Exhibit -- I had them on a list here. It's Plaintiff's Exhibits 3642, 43, 44 and 45, Defendants' Exhibit 4507, Plaintiff's Exhibit 1137 and 1126.

And then I have a proffer of one more exhibit, Defendants' Exhibit 4585, which is one more letter that I would have concluded that line with yesterday, although I understand the Court has asked us to stop that line of examination. So we respect that, but I just want to make the proffer on the record.

THE COURT: All right.

MR. BADENOCH: And just for the record, our position is that that does relate to credibility consistent with the Court's prior ruling because he gave a story of conception and we feel it's inconsistent with his prior --

THE COURT: Right. And I think the discussion we had in our -- when we pretried this case was that the defendants would be given some leeway, but there would be a line as always because conception is not at issue and I just -- in my belief, you crossed that line.

But, in any event, I don't know what any of these exhibits are, so I suppose we need to go through them to see what, if anything, should be admitted or not.

MR. DISKANT: I object to all of them, your Honor. They are basically a collection of documents. To the extent they had -- I would look at it this way. I think the examination made points that the documents make. I think it went way over the line. I think adding the exhibits to that would compound the damage. They are -- the documents themselves are utterly irrelevant to any issue in the case. They're receipts from balloon catheters and they're grant applications

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Eric Harris.

- - -

... ROBERT W. CROCE, having been duly sworn as a witness, was examined and testified as follows ...

THE COURT: You may proceed, Mr. Harris.

DIRECT EXAMINATION

BY MR. HARRIS:

Q. Good morning, Mr. Croce.

A. Good morning.

MR. HARRIS: Good morning, ladies and gentlemen.

BY MR. HARRIS:

Q. By whom have you been employed?

A. I've been employed by Johnson & Johnson, and I retired January 1st of 2005, just a couple months ago.

Q. And how long had you worked there?

A. Over 36 years.

Q. Can you tell us a little bit about the business of Johnson & Johnson?

A. Yes. We're the largest health care company in the world and we kind of divide our businesses into three different elements or segments. The one that most people are aware of is the consumer group, which is baby powder, baby oil, Tylenol, Nutragena. We have

Page 310

a large Pharmaceutical Group. They make drugs in the cancer area, arthritis, and literally many, many other areas where serious illness is.

And then there's the Medical Device Group. And the devices range from sutures, which close up surgical incisions, surgical instruments, orthopedics and, of course, stents and products that we use in the stenting procedure.

Q. And right -- prior to your retirement, what was your job title and your job responsibilities?

A. I was company Group Chairman for Johnson & Johnson and I had worldwide responsibilities for Cordis. Of course, in 2004, I was transitioning slowly some of those responsibilities over to my replacement.

Q. And who is Cordis?

A. Cordis is a Johnson & Johnson company and one of the elements of Cordis is Cordis cardiology, and they make and sell products like stents and the other products that you saw in some of the illustrations yesterday with Dr. Fischell: The guide wires, catheters, balloons, stuff like that.

Q. And when did you first get responsibility for Johnson & Johnson's stent business?

A. That was in October of 1995.

Q. How did Johnson & Johnson itself get involved in

Page 311

developing stents?

A. Well, you heard a little bit about that yesterday.

MR. HANLEY: Objection. No foundation.

THE COURT: Do you want to lay a foundation for the question, Mr. Harris?

MR. HARRIS: Yes. I will do that, your Honor.

BY MR. HARRIS:

Q. Prior to your involvement, your responsibility for the Cordis stent business, were you aware of Johnson & Johnson's activities in the stent field?

A. Yes. I was on the Board of Directors of Ethicon, which is another Johnson & Johnson company, that signed the agreement with Dr. Palmaz, back in 1987.

MR. HARRIS: May he proceed, your Honor?

THE COURT: Yes, you may.

BY MR. HARRIS:

Q. So I guess the question -- let me repeat the question. How did Johnson & Johnson first become involved in developing stents?

A. It started with the exclusive licensing agreement between Ethicon, which I've explained is on the Johnson & Johnson company, and Dr. Palmaz's partnership, to develop his patented ideas into stent products, basically.

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Q. And did you enter into a licensing agreement with them?

A. Yes. It was an exclusive licensing agreement with Dr. Palmaz's partnership.

Q. And when you say an exclusive licensing agreement, what does that mean?

A. Well, exclusive licensing would mean that if someone was going to make or sell a product using Dr. Palmaz's patented ideas, they would -- they need our permission. So it was basically or for use only.

Q. And did Cordis and J&J compensate Dr. Palmaz's company for the right to use his patent?

A. Yes. We paid the partnership royalties, $185 million, starting with the first commercial sale. And that lasted up until 1999.

Q. 1999? What happened in 1999?

A. Well, we heard this several times. We bought the patents outright, and the licenses to them, for200 million.

Q. So who owns -- who owns the patents today?

A. Cordis owns the patents today.

Q. Okay. Now, after Johnson & Johnson entered into this licensing agreement with Dr. Palmaz's company in 1986, did they invest money in order to develop Dr. Palmaz's patented ideas?

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A. Yes. We invested a large amount of money. It was a hundred million dollars. And to put that in perspective, it's the largest amount of money that we had ever spent at this point on a medical device. And it was the largest amount of money ever spent on any medical device in the industry at that particular point.
Q. Was it a risky investment?
A. Yes. It was a high risk, and I think you've heard many different things about it. But basically, it was an unproven concept as far as the durability and safety and efficacy, and there was a tremendous amount of skepticism, even in the cardiology community, at that time, if this was really going to work.
Q. Now, in order to sell stents in the United States, did Johnson & Johnson need to get the approval of a -- of the Government?
A. Yes. Every medical device needs FDA approval or Food & Drug Administration before you could, you know, make it available to physicians to use with patients.
Q. During this time when you were seeking FDA approval and when Johnson & Johnson was investing all of this money to develop the stent, was their publicity suggesting that stenting may not work?
A. Yes. There was quite a bit of publicity, but one particular article stands out. It was the New York

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Times article in 1991.
Q. Mr. Croce, could I ask you, I think you have it up there, to take a look at what we've marked as Plaintiff's Exhibit 186.
A. Yes. It's the article I just mentioned.
MR. HARRIS: Move Plaintiff's 186 into evidence, your Honor.
MR. HANLEY: No objection.
THE COURT: Thank you.
DEPUTY CLERK: So marked.
*** (Plaintiff's Exhibit No. 186 was received into evidence.)
MR. HARRIS: Do you want to put it up, please?
BY MR. HARRIS:
Q. This is the article you were referring to?
A. Yes, this is it.
Q. And what is the subject of this 1991 New York Times article?
A. It basically is saying a new study came out on stents which, by the way, was not the Palmaz/Schatz stent, but failed in the clinical trial.
Q. And what does this headline, what does that reflect?
A. It says failing grade. Usually, when you do a

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clinical trial, you usually have a success or not success, and this meant this one failed, so it was not successful.
Q. All right. Now, let me direct your attention to the first sentence in the article.
What are the authors saying here?
A. Well --
MR. HANLEY: Objection, your Honor. The document is in evidence and it speaks for it.
THE COURT: The objection is overruled.
MR. HANLEY: You don't need the witness to relate what's in here.
THE COURT: Overruled.
THE WITNESS: Basically, this was a product that had high hopes. The physicians were struggling with restenosis, so they wanted some solution. They had high expectations and, basically, what they found out, that the product that was in this study actually made things worse, so it was very disappointing.
BY MR. HARRIS:
Q. And let me just make -- let me ask you: This was not the -- the test they were referring to in this article was not a test of the Palmaz/Schatz, then, was it?
A. No. As I already said, this was a coil stent. It

Page

was not the Palmaz/Schatz.
Q. Okay.
MR. HARRIS: Can we highlight that passage a little further down, please?
BY MR. HARRIS:
Q. What are the authors saying here? Dr. Isner.
A. Yes. Dr. Isner and several other leading cardiologists had comments throughout the article.
Q. All right.
A. His was, is sobering, that's another way of saying disappointed. But it wasn't what they had anticipated.
Q. Okay. Now, during this time period we're talking about, what was the FDA telling Cordis and Johnson & Johnson?
A. The FDA has a different charge. They -- they embrace new technology. But they are responsible to make sure that things that get out for widespread use are safe and effective. And at that time, they were probably even more skeptical than these -- and they were insisting with our discussions with them that we provide really hard clinical and scientific evidence that these products were durable, that they could stay in patients for a long time because they were going to be there forever.

MR. DISKANT: We'd like to offer it as an exhibit. We've calculated the standard deviation. Dr. Buller has approved it.

MR. BADENOCH: I assume it's going to demonstrate some point that they are going to make. I don't think that makes it a fact exhibit. I think that makes it a demonstrative exhibit.

THE COURT: If you don't mind it being shown as a demonstrative, we'll talk about admission later.

MR. BADENOCH: I don't mind it being shown and I don't object to the rest of it.

MR. DISKANT: That's fine.

THE COURT: All right. Thank you.

MR. DISKANT: In that case, I don't mind.

Can we show 7236 first?

No. Why don't you put up 7236-A?

BY MR. DISKANT:

Q. Okay. Dr. Buller, what has been added to 7236?

A. All of this is is tabulated form of measurements of the wall thickness of the NIR stent. I think if we could blow it up, this says wall thickness measured in inches. And this is a series of measurements.

Q. Go ahead.

A. These are Boston Scientific's own measurements of wall thickness, measured in inches. These are measuring

various different measurements here. They are tabulated.

Boston Scientific calculated the average. This was .00366, which was the average. All that I have had added to this is a measurement of the -- if you like, the variation, which is scientifically measured as a standard deviation. And the standard deviation which is in red here that I have had added is .00006, so that is six hundred thousandths of an inch variation.

So this is an incredibly uniform device.

MR. DISKANT: I offer 7236 and 7236-A.

Would you like me to address that, your Honor?

THE COURT: I can barely hear you, Mr. Diskant.

MR. DISKANT: Let me just offer 7236, which is the one without the standard deviation. I will address the other one later with the court.

MR. BADENOCH: No objection to that one. And, your Honor, it's just a question of playing the same rules here.

THE COURT: Exactly.

MR. BADENOCH: I don't actually object to his calculation if we can have the same way with our demonstratives.

MR. DISKANT: I'm fine with what we have.

I'm happy.

THE COURT: All right. Thank you.

BY MR. DISKANT:

Q. Based on the measurements done by Boston Scientific's engineers, the wall thickness the NIR stent, do you have an opinion as to whether its wall thickness is substantially uniform?

A. Absolutely. It's substantially uniform. These measurements clearly show that the wall has very little variation.

Q. Have you had an opportunity in the course of this case to review Boston Scientific's internal documents?

A. Yes.

Q. Have you seen any internal documents that disagree with the analysis you've just presented about the thickness of its wall surface?

A. No. I've looked carefully through a lot of documents, including one submitted to the FDA by Boston Scientific, to get a license to sell the NIR stent and I have seen nothing that suggests that there is any significant variation in wall thickness other than this very limited point of the welds. There are very tiny little welds along the length. They are only something on the order of a couple of percent of the wall surface.

They take up a tiny fraction of the wall

surface.

- - -

Q. Now, these welds they talked about, what kind of variations do they cause?

A. I'm sorry, Mr. Diskant, I missed your question.

Q. What kind of variations in thicknesses do the welds cause?

A. They are absolutely tiny. The scale of the thing is small. There is an increase. I think again Boston Scientific's expert has measured them. I think at the sort of the peak of the little hump. They can go up to 70 or so, 70-percent increase in thickness. 74 percent, from memory, is the absolute maximum.

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A. (Continuing) But the important thing is these are tiny little spots and, compared with the whole surface of the stent, they are only a few percent of the surface of the stent.
Q. Is 74 percent referring to both side?
A. 74-percent increase in thickness. So that's from top to bottom and taking that -- the peak of the hill and the bottom of the -- the -- the stent has this little weld, which is like a little spherical weld. Essentially, measuring from the very bottom to the very top, it only reaches about 74 percent increase in thickness at maximum.
Q. Is Palmaz -- can you make a Palmaz slotted tube stent of Claim 23 by using welding?
A. Yes. Absolutely. I mean, Dr. Palmaz's invention does not stop at being made as a flat sheet, cutting a design in it and rolling it up and then joining it together by whatever means you chose, like little welds, for instance. And the little welds on a tiny little area don't affect the uniformity of the much larger part of the stent. So it is largely uniform.
Q. Now, you told us, we looked earlier at PX-1, which was Dr. Palmaz's original filing. And you told us that it had other methods of manufacture for the slotted tube

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embodiment; is that right?
A. Yes, that's correct.
Q. Let's take a look at that. PX-1.
Would you first look at 5743?
Okay. The '665 patent says, preferably, tubular shaped member 71 is initially a thin-walled stainless steel tube.
Is that Palmaz's preferred idea?
A. Yes. This is the way I was describing earlier. You can make Dr. Palmaz's invention by starting with a tube, a cylindrical tube of metal, and then you could cut slots out. But that is not the only way you can make even his preferred embodiment.
Q. The previous sentence says, bars 78, 79 may be joined to one another in any conventional manner, such as by welding.
Is welding a perfectly permissible way to make a stent of Claim 23?
A. Yes. Yeah.
Q. And if you use welding, does it use weld spots?
A. Yes. Welding will leave little weld spots.
Q. Okay. Let's go back and look at some photos that BSC has published.
Back to the PX-72 owe seven, which I think we just looked at. Yes. That's in evidence.

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Can we just look at the picture on Page 132? Can we just pull that up? This area right here (indicating). From here to there. Super.
That's not a very good copy, but can you see any welds in either published photograph?
A. I can't on that picture, no. I can't see. I'm looking on my screen as well, which is rather better than you are projecting in the courtroom. But, clearly, you can see the design of the NIR stent. But on that picture, I can't identify a clear weld spot.
Q. Okay. Let's get a clearer picture of where the welds are.
Let me show you PX-339, and which I offer the BSC engineering drawing.
MR. BADENOCH: No objection.
THE COURT: Thank you.
DEPUTY CLERK: So marked.
*** (Plaintiff's Exhibit No. 339 was received into evidence.)
BY MR. DISKANT:
Q. Let's just take a look at the pattern of the NIR stent, if we could. I think we have an illustration.
MR. DISKANT: Can we blow up this picture?
BY MR. DISKANT:
Q. What are we looking at now, Dr. Buller?

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A. This is -- this is the pattern of the NIR stent. This is representing a sheet of metal or part of a sheet of metal on which the NIR stent pattern is cut and here is represented the actual pattern of the NIR stent on the flat sheet of metal as it would be cut.
Q. I think you told us there would be one weld for each ring.
Can you just sort of point out where the welding?
A. Yes. If you imagine this is cut flat and then it's rolled together and joined and the weld would be one for each ring. There will be a weld here. I represented it as a red dot here. I put one for each of the -- there would be another weld here, another weld here and another weld here. I've made these with a sequence of red dots just showing where the welds are, which will join it into a cylindrical tube.
And now here for this version of the NIR stent, here are the six little spots where the weld -- clearly, the weld will join this bit to this bit and this will become a cylindrical structure.
Q. Okay. Like a seam?
A. Yes. It's joined along that line. It's rolled into a cylinder and it's a bit like a seam, but you might even see -- what you call it, a can in a

Exhibit

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- VOLUME E -
IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE
- - -

CORDIS CORPORATION, : CIVIL ACTION
Plaintiff :
:
vs. :
:
MEDTRONIC AVE, INC., BOSTON :
SCIENTIFIC CORPORATION and :
SCIMED LIFE SYSTEMS, INC., :
Defendants : NO. 97-550 (SLR)
- - - - -
BOSTON SCIENTIFIC CORPORATION : CIVIL ACTION
and SCIMED LIFE SYSTEMS, INC., :
Plaintiffs :
:
vs. :
:
ETHICON, INC., CORDIS CORP. :
and JOHNSON & JOHNSON :
INTERVENTIONAL SYSTEMS CO., :
Defendants : NO. 98-19 (SLR)

- - - - -

CORDIS CORPORATION, : CIVIL ACTION
Plaintiff :
:
vs. :
:
MEDTRONIC AVE, INC., BOSTON :
SCIENTIFIC CORPORATION and :
SCIMED LIFE SYSTEMS, INC., :
Defendants : NO. 98-197 (SLR)

- - -
Wilmington, Delaware
Wednesday, March 23, 2005
9:25 o'clock, a.m.
- - -
BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury
- - -
Valerie J. Gunning and
Leonard A. Dibbs,
Official Court Reporters

APPEARANCES:

ASHBY & GEDDES
BY: STEVEN J. BALICK, ESQ.

-and-

PATTERSON, BELKNAP, WEBB & TYLER LLP
BY: GREGORY L. DISKANT, ESQ.,
EUGENE M. GELERNTER, ESQ.,
WILLIAM F. CAVANAUGH, JR., ESQ.,
MICHAEL TIMMONS, ESQ. and
SCOTT HOWARD, ESQ.
(New York, New York)

-and-

JOHNSON & JOHNSON
BY: ERIC L. HARRIS, ESQ.

Counsel for Cordis Corporation

YOUNG, CONAWAY, STARGATT & TAYLOR
BY: JOSY W. INGERSOLL, ESQ.

-and-

KENYON & KENYON
BY: GEORGE BADENOCH, ESQ.,
MARK CHAPMAN, ESQ. and
WALTER HANLEY, ESQ.
(New York, New York)

Counsel for Boston Scientific Corporation

- - -

PROCEEDINGS

(Proceedings commenced at 9:25 a.m., and the following occurred without the presence of the jury.)

MR. BADENOCH: Good morning, your Honor.

THE COURT: Good morning. You can keep talking. I just need to move some of these things out of my way.

All right.

MR. BADENOCH: We did prepare some language that we believe should be given to the jury as an instruction at the beginning on the business of referring to the absence of Brian Brown. And counsel and I have agreed on this, but we've scribbled up our form in which we prepared the agreement.

It might be better if I read it or I can hand it up. But what it says is, this is a timed trial in which the total time for each party to present its case is limited. Sometimes a party does not call a witness on the list of witnesses you read at the outset of the case. You are not to infer anything from that.

THE COURT: All right.

MR. BADENOCH: I will hand this up.

THE COURT: Hand it up, yes, then I will make sure I can read it as well as you did, Mr. Badenoch.

(Mr. Badenoch handed a document to the Court.)

THE COURT: Yes, I think I have it.

MR. BADENOCH: The other thing, your Honor, we had -- we're down to just a very few extremely minor things on the verdict form and the instruction, and I really think this is just clarity.

In the verdict form, where it says Claim 23 of the '762 patent requiring that the wall of, now it says a tubular member, and we want it to say the tubular member, which conforms, I think, to several other places throughout the instruction. And we feel, since there's clearly one tubular member in the accused stent that has been, as it has been presented to the jury, that that would be clearer.

I really think it's non-substantive. Counsel has said, Well, no, it departs from the claim construction, and I don't -- it did not seem to me that that was correct.

THE COURT: Well, I guess if it's non-substantive and if it isn't in dispute, and the claim construction reads an and we're going to the jury this morning, I wasn't confident that I wanted to go to the trouble of changing the to an every place it said

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other thing.
He also repeatedly said Dr. Palmaz has been adequately compensated, Johnson & Johnson has been adequately compensated. That's not a proper argument.
THE COURT: No more of that, for sure.
MR. DISKANT: Thank you, your Honor.
(Luncheon recess taken:)
- - -

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AFTERNOON SESSION

(Proceedings resumed at 1:35 p.m.)

THE COURT: All right. Let's bring our jury in.
(At this point the jury entered the courtroom and took their seats in the box.)
THE COURT: All right. Mr. Diskant?
MR. DISKANT: Thank you, your Honor.
Ladies and gentlemen, this will be the last time that I have an opportunity to speak with you before you deliberate. I think issues in this case you will find are very, very simple. The issues are simply right and wrong. The right way of doing business and the wrong way of doing business, honoring our patent system, respecting someone else's property or not. That's really what this case comes down to.
Boston Scientific and SciMed have come before you with two defenses that, respectfully, I think, when you deliberate, I would ask you to consider as absurd and unsupported by any actual evidence. They've come before you and suggested that their wall thickness is insubstantially uniform, which all the documents say it

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is and Mr. Badenoch spent all of his direct examination explaining away BSC's documents and not showing you any that supported his position.
They are coming before you, asking you to invalidate pioneering Palmaz patent, Claim 23, based on the ridiculous staple-like design of Ersek, and I mean no disrespect to Ersek, but it did not work and it wasn't ever commercialized. It has nothing whatever to do with stenting.
Let's talk, first, about the right way to do business with respect to the patent system. Not trespassing.
Mr. Croce, company Group Chairman from Johnson & Johnson, told you other competitors, not BSC, other competitors have sought permission to use Abbott's -- to use Palmaz's patent by taking a license.
One example is Abbott Pharmaceutical, a large U.S. pharmaceutical company. They knew they needed our permission to market stents in the United States. That's the truth if it's going to be a balloon expandable slotted tube stent like BSC sells. So they offered to pay a substantial royalty and we came to terms and we gave them a license to go on the market. The '762 patent. 26 percent on net sales. Guaranteed if you look at the contract which is in evidence, $500 a stent for a drug-

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eluting stent sold by Abbott. $500 a stent, each and every one, for the right to use the power of Dr. Palmaz's ideas to enter the stent marketplace. That's the right way. That's why we have a patent system.
Now, you heard some arguments, Oh, Johnson & Johnson has been adequately compensated, Dr. Palmaz has been adequately compensated. It's okay for us now to take their property and use it without permission. I think you know that's not the right way to think about things. You paid for your house. It doesn't mean someone can come and sleep in your bedroom.
But the real fact is, the real fact is that investments by companies like Johnson & Johnson of innovative therapies are extremely expensive and for the ones that pay off like this, and there are many that don't, are just money poured down the drain, as Bob Croce told you. $400 million on a direct myocardial vascularization. I thought about that. That's on cross-examination by Boston.
Yes, that's the truth. The truth is that companies like Johnson & Johnson win some and lose some. They lose more often than not, and you and I and our family members and everyone in the community wants them to make those investments. You want companies like Johnson & Johnson to take risks on innovative, unproven

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therapies, like Dr. Palmaz's was in 1986, because those innovative, risk-taking ideas, with large capital investments from large companies that are able to make that investment and take the risk of complete and utter loss, that's what makes us have a better, safer, healthier society.

Johnson & Johnson is willing to pay for innovative technologies. It invested a hundred million dollars in the Palmaz, bringing it to market. It paid Dr. Palmaz properly many millions of dollars in royalties and then bought out his rights for $200 million.

Dr. Palmaz is very deservedly a wealthy man. Johnson & Johnson, very correctly paid him for the right to use his invention and it purchased the rights to the '762 patent so it could protect its rights on the marketplace of ideas. And Boston and SciMed just don't seem to care.

Now, I like George Badenoch. He's a fine person, a fine lawyer. He tries an able case, but his clients, Boston Scientific and SciMed, are engaged in a, say this respectfully, but intentionally, a dirty, mean-spirited game. You saw it here in this trial.

They don't know what to say about Dr. Palmaz, so in his opening, George said, Oh, Dr. Palmaz is entitled to credit, we agree with that. He made an

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important contribution. We all owe him great credit for what he did.

And then Dr. Palmaz showed up and was cross-examined. And was this disgusting? We went through some of his awards.

Oh, shortly before that, you donated to that institution a million dollars; correct?

That's the University of Texas, where Dr. Palmaz is on the faculty and he has given them a whole lot more than a million dollars. He has funded research for years there.

Did he buy this award? Was that the point of that questioning? No invention has revolutionized the treatment of coronary artery disease like the intravascular stent. Developed by Dr. Julio Palmaz, the Palmaz stent was patented in 1988. The stent has impacted the lives of millions of people around the globe.

Was Boston trying to suggest that he paid off the University of Texas? That he bought entry into the Smithsonian?

Or this one: Do you see the one of the sponsors listed here is Cordis? Yes, Cordis and a whole bunch of other companies, including other stent manufacturers, are sponsors of Surfaces in Biomaterials Foundation, a respected, not-for-profit in this industry.

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Okay. But is it true that the stents made Dr. Palmaz's device -- it just happens to be true. You know what? Boston Scientific, the defendant in this case, agreed with that in 1997, when it agreed to award the Palmaz/Schatz stent the award for the most important new medical device in the last 15 years. All of this comes from Dr. Palmaz.

Oh, yes. Cordis is a sponsor. So are many other fine companies and this is a very fine and fitting tribute to Dr. Palmaz.

Look. Here's a picture with you and your wife and underneath it, there's Marv Woodall. Who's that? Oh, my. Here at the International Society of Endovascular Specialists, medical doctors have gathered to honor Dr. Palmaz for his development of the endovascular stent, a landmark professional contribution, and look at this just horribly embarrassing fact. I just can't believe it. Marv Woodall, who used to work at Johnson & Johnson, offered a toast. I will offer a toast to Julio Palmaz any day of the week.

What was that cross-examination about? And then it continued into the testimony of each and every one of their witnesses.

Kobi Richter, Dr. Richter. The smaller the invention, the more impressive. Oh, so small, so

Page 12[illegible]

impressive. But he pushed it forward and he succeeded. I'm not trying to adjudge the invention, small though it is. Thank you, Dr. Richter.

How about this? Without being derogatory, Dr. Buller, he may be a very good stent driver. I want to believe that he is. I want to believe that.

Thank you, Dr. Richter, for wanting to believe that.

I would be proud to have Dr. Buller operate on me or my children on any day.

Then Dr. Snyder. I don't consider parties, these are nice recognitions for hard work. It embarrassed George so much, he had to talk to you about it.

Here's another great one. The Palmaz stent, part of a special presentation, the world's most successful medical device. That's inaccurate. Must be his home town paper. The most successful medical device would be one of the more recent stents? They're all Palmaz stents. That's the point. That's why we're here. Palmaz invented the longitudinally slotted balloon expandable stent, which everyone uses. Everyone has built on his fine contribution to medicine.

Dr. Low. Palmaz invented the peripheral stent with the balloon. Schatz developed the heart one. Yeah. Schatz developed the heart one.

Exhibit

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- VOLUME I -
IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION, : CIVIL ACTION
Plaintiff :
vs. :
MEDTRONIC AVE, INC., et al. : NO. 97-550 (SLR)

BOSTON SCIENTIFIC CORPORATION, et al., : CIVIL ACTION
Plaintiffs :
vs. :
ETHICON, INC., et al., :
Defendants : NO. 98-19 (SLR)

CORDIS CORPORATION, : CIVIL ACTION
Plaintiff :
vs. :
BOSTON SCIENTIFIC CORPORATION, et al., :
Defendants : NO. 98-197 (SLR)

Wilmington, Delaware
Wednesday, December 6, 2000
9:00 o'clock, a.m.

BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury

Official Court Reporters

APPEARANCES:

ASHBY & GEDDES
BY: STEPHEN J. BALICK, ESQ.

-and-

PATTERSON, BELNAP, WEBB & TYLER, LLP
BY: GREGORY L. DISKANT, ESQ.,
EUGENE M. GELERNTER, ESQ.,
WILLIAM F. CAVANAUGH, ESQ. and
MICHAEL J. TIMMONS, ESQ.
(New York, New York)

-and-

JOHNSON & JOHNSON
BY: ERIC I. HARRIS, ESQ.

Counsel for Plaintiffs

YOUNG, CONAWAY, STARGATT & TAYLOR
BY: JOSY W. INGERSOLL, ESQ.

-and-

KENYON & KENYON
BY: GEORGE E. BADENOCH, ESQ.,
PAUL A. BONDOR, ESQ.,
ALBERT J. BRENEISEN, ESQ.,
MICHAEL ZACHARY, ESQ. and
ARTHUR GRAY, ESQ.
(Washington, D.C.)

Counsel for Defendants

- - - - -

PROCEEDINGS

(Proceedings commenced at 9:00 a.m., and the following occurred without the presence of the jury.)

THE COURT: I understand there is are an issue.

MR. DISKANT: Yes, your Honor. The defendants wish to play today the videotape deposition of Dr. Stanley Carson. We do not object to that. Also, however, they wish to introduce into evidence Dr. Stanley Carson's sworn declaration.

That is classic hearsay. Dr. Carson was examined. He was asked questions. He was cross-examined. They had the opportunity to bring him here to Court live if they wanted.

But a written witness statement does not come into evidence, it doesn't go back to the jury so they can read it. It is inadmissible. We object to it.

MR. BADENOCH: Your Honor, the problem is this: Dr. Carson is, of course, not under our control. He lives in California. Unlike a situation where we were taking a -- if we had had an opportunity to examine him on direct and they had cross-examined, which is not the situation here -- what happened here is he filed a

declaration in the Cook case. He was then fully cross-examined on the declaration by counsel for EGP and counsel for Cordis.

What we have done to create the video is to collect from that -- from what is basically hostile examination the most coherent testimony that we can.

In that testimony, there is clear references to a paragraph of the declaration he is talking about. And in order to make sense of what he is talking about, the jury needs to see the text of what it is that he is being cross-examined about by counsel for EGP and/or Cordis.

The other thing is that, basically, -- so for context, it is absolutely necessary. Because they cross-examined, basically, the policy on hearsay is that you don't allow hearsay because there is no chance to confront and cross-examine the witness. That is not true here.

What we have is kind of like the English system or the system in many courts in this country where you have direct testimony put in by a statement and then you have live cross-examination.

The other thing is the dates. They are in the part that they are going to play to attack Dr. Carson, who is going to point out that he was paid for an

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"Answer: Yes. Inasmuch as I understand fraud that -- I need to clarify that.

"I was upset when I read this, and I felt I had been misled.

"Question: And why?

"Answer: There's more than one item, and I may not take these in the order that they appear in this.

"Question: Okay. Go ahead. If you can remember off the top of your head, go ahead and tell me.

"Answer: There are drawings here, and the first drawing I recognize as being very similar to and very much akin to the one that I made, that I gave to Dr. Palmaz when I first proposed this idea.

"Question: Are you referring --

"Answer: That is referred to as 1-A and 1-B in this document.

"Question: Okay. And --

"Mr. Kramer: The record should reflect you're holding up the patent when you say this document, the '665 patent.

"Go ahead.

"The witness: Yes, I think it's also labeled here at the top as patent.

"Now, I would assume perhaps -- I may be all wrong -- but also for other reasons that the patent, if

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it existed -- and, you know, I didn't have any reason to question it being -- I don't think I thought about it. But Johnson & Johnson's putting money into the market, there's probably a patent.

"I had worked with them long enough to know that they like to protect, as does everybody, their investments.

"Now, I would have felt that the patent would revolve around a particular design, configuration, manufacturer and use of the Palmaz configuration, or Palmaz stent it's been referred to, which is a specific type of stent.

"That's one item.

"And so here is another drawing that I don't think is original with Dr. Palmaz, but it now appears in this patent and --

"Question: Could you, for the record, say -- when you said this -- another drawing --

"Answer: Another drawing, Figure 1-A and 1-B. 2-A and 2-B appears to be that of the Palmaz stent. The -- that's a bit annoying. It was to me at the time.

"The other thing is that -- another thing is -- not just the other thing, but another thing is that, quite frankly, in reading this, it appears to me that what has been covered by this patent is delivering a stent on a

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balloon to a specific location.

"And I don't feel now, to this day, that that was his original concept. I feel I presented that concept to him. And at the time that I did it, I spent a lot of time explaining the stent and the concept and didn't get any feeling that this is anything but unfamiliar territory to him at that time.

"The other thing that's going on here is that -- I don't know whether these are page or paragraph numbers here, the numbers at the top.

"Question: Are page numbers.

"Answer: All right. I'm going to refer, then, to Page No. 4 on the document '665.

"Mr. Kramer: Let me explain this. That's Page No. 4, Column 4.

"And then if you want to look under Column 4 where you see the numbers here, you can refer specifically to those numbers.

"That would be Column 4, Line 10, for example, would be that line. That's the way you read these?

"Answer: Four lines above Line 10 on Column 4 in '665, it states that a further feature of the present invention is that a wire mesh tube may be utilized as the intraluminal graft, which is I don't believe how I visualized the Palmaz stent as being a wire mesh.

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"I feel that the wire mesh was one of the ideas that I had originally proposed to Palmaz and to Vascor.

"And reading on Column 3, same line --

"Mr. Kramer: Yes, yes.

"Answer: Same lines. Okay. -- Line 25 and in that same paragraph down from that --

"Mr. Kramer: You can read them into the record, if you wish.

"The witness: Okay.

"Answer: 'The present invention includes, an expandable, tubular shaped membrane -- member having first and second ends and a wall surface disposed between the first and second ends, the wall surface being formed by a plurality of intersecting elongate members' -- which to me appears to be a wire mesh.

"And again, I was a bit shocked.

"One other item comes to mind is the date.

"Question: And what about that upset you?

"Answer: Well, there was a reason that I signed this November 15th, 1985 document to Dr. Palmaz. And I have just been reminded of the date, because I had sought this down and given a copy to Brian Bates.

"And at the time that I signed this was not for purposes of payment, per se. At least that's not why

I was told I was signing this patent.

"So I feel that if he were going to patent my ideas, that he should at least have told me.

"Question: The proposal to -- that you refer to as the proposal to Hancock -- Vascor, tell me what that was like.

"Answer: Well, it was a pretty basic proposal in that we felt we needed to, in discussions with Dave Lentz, outline why something was needed, what was being done now and what we were proposing.

"Question: When you say 'we,' who's the other -- who's the 'we?'

"Answer: In discussions with Dave Lentz, he felt they needed this to fund it. They were fairly unfamiliar with catheters and catheter work, that they were not -- that wasn't part of their -- apparently, their mission.

"Question: But I thought you said we drafted something. Who drafted something?

"Answer: I don't -- we thought is what I recall saying."

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"Question: Was there a written proposal given to Vascor?

"Answer: Yes.

"Question: Who drafted that proposal?

"Answer: I drafted it, along with Dr. Palmaz. We both worked on it. We exchanged copies and came up with a final.

"Question: What did it say?

"Answer: Best of my recollection, it stated that arteries that are obstructed cause problems --

"The Reporter: I am sorry.

"The Witness: -- arteries that are obstructed cause problems in the human body and that one of the ways to open the arteries or to get necessary blood flow through the arteries was to dilate the artery.

"One problem with the technique of dilating an artery is that some arteries couldn't be dilated to adequate size and that some arteries would rebound after dilatation, and thrombosis in some arteries or clot formations in some arteries would occur after dilatation.

"Basically stated, what we felt between us, the current state of the art of balloon dilatation was the arteries.

"And that in order to offset the dilatation

or the recurrence after dilatation or the unsuccessful dilatation when an artery rebounds and perhaps keep the artery open longer but, certainly, initially, give more successful result, was to put a stent at the time of the dilatation, and the stent would keep the artery open by its configuration, framework, support.

"We spent a lot of time in the proposal, in our discussions between Dr. Palmaz, myself and Dr. Lentz as to what would be acceptable with them as a proposal, in deciding how much time in the proposal to give to the current state of the art and catheters being used and so on, because we felt we were presenting it to people that weren't right in the midst of doing CAT digitization and this sort of thing.

"Then we went to describe -- to make a proposal in the last part of it after outlining the problem and the possible solution for the problem in a way that it could be done.

"There's some drawings. Both of those drawings, I think, were in the proposal.

"The drawings that I looked at earlier, they're on one sheet of paper. They were held up for the camera.

"I don't think they're in that format, as I recall. They may be. But to show what it might look

like.

"This is just a proposal. We have had not made one. We wanted to show how it might be delivered. We wanted to show how it might be made -- not how, but what it might be made of because the people that I was working with at Vascor and Hancock, a lot of the research that has been done has been on materials that can be used and retained in the vascular system.

"Question: I'm sorry. A lot of research who has done? That you have done or that they have done?

"Answer: That I had done with them had been done on the use of different materials in the vascular system that would or would not be acceptable to be left in the vascular system.

"Question: When was the proposal written?

"Answer: Most of the proposal, I believe, was written in the early eighties. Early eighties.

"Question: 1980?

"Answer: Yes.

"Question: Well, let me ask you something. Had you thought of this concept prior to Dr. Palmaz asking you the question that you talk about in Paragraph 6?

"Answer: I thought of the idea of leaving something in the blood vessel, yes.

"Question: Had you thought of the idea of --

Exhibit VV

- VOLUME C -
IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION, Plaintiff vs. MEDTRONIC AVE, INC., BOSTON SCIENTIFIC CORPORATION and SCIMED LIFE SYSTEMS, INC., Defendants — CIVIL ACTION — NO. 97-550 (SLR)

BOSTON SCIENTIFIC CORPORATION and SCIMED LIFE SYSTEMS, INC., Plaintiffs vs. ETHICON, INC., CORDIS CORP. and JOHNSON & JOHNSON INTERVENTIONAL SYSTEMS CO., Defendants — CIVIL ACTION — NO. 98-19 (SLR)

CORDIS CORPORATION, Plaintiff vs. MEDTRONIC AVE, INC., BOSTON SCIENTIFIC CORPORATION and SCIMED LIFE SYSTEMS, INC., Defendants — CIVIL ACTION — NO. 98-197 (SLR)

Wilmington, Delaware
Monday, March 21, 2005
9:05 o'clock, a.m.

BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury

Valerie J. Gunning and
Leonard A. Dibbs,
Official Court Reporters

APPEARANCES:

ASHBY & GEDDES
BY: STEVEN J. BALICK, ESQ.

-and-

PATTERSON, BELKNAP, WEBB & TYLER LLP
BY: GREGORY L. DISKANT, ESQ.,
EUGENE M. GELERNTER, ESQ.,
WILLIAM F. CAVANAUGH, JR., ESQ.,
MICHAEL TIMMONS, ESQ. and
SCOTT HOWARD, ESQ.
(New York, New York)

-and-

JOHNSON & JOHNSON
BY: ERIC I. HARRIS, ESQ.

Counsel for Cordis Corporation

YOUNG, CONAWAY, STARGATT & TAYLOR
BY: JOSY W. INGERSOLL, ESQ.

-and-

KENYON & KENYON
BY: GEORGE BADENOCH, ESQ.,
MARK CHAPMAN, ESQ. and
WALTER HANLEY, ESQ.
(New York, New York)

Counsel for Boston Scientific Corporation

PROCEEDINGS

(Proceedings commenced at 9:05 a.m., and the following occurred without the presence of the jury.)

THE COURT: Mr. Diskant?

MR. DISKANT: Your Honor, we have a few issues to raise before the examinations begin, I'm sorry to say. In one way or another, they all relate to the issue that we raised last week, which was BSC's attempt to suggest that there was only one claim in issue, and that they were entitled to some kind of mileage after that. Your Honor last week admonished them that that was misleading and asked them to stop.

We received demonstratives today, last night, for the anticipated testimony of their first expert, Dr. Snyder, which are riddled with this kind of comparison. I raise it now because Dr. Buller is about to begin cross and I fear they may attempt the same cross with him.

I will hand up a package of documents.

First, what is happening is the theory of BSC's case has radically changed. The first document in your pile is Dr. Snyder's expert report on which we prepared the case. And if you just look at Paragraph 7,

he summarizes the theory of their case, which is one of ordinary skill who knew about balloon angioplasty, knew that the Palmaz abstract discloses the concept of a balloon expandable stent, and then the Ersek structures of particular design that one would combine.

And so basically their theory of the case was that Claim 23 as it is, in fact, is, a structure claim for use in a particular method and then they were combining the method with the structure in order to make it that obvious in this case.

The Palmaz abstract has all but disappeared. It was not mentioned in opening. There is maybe one slide, Mr. Snyder's demonstratives on it, and they've turned their case into simply a structure case. They have now recast Claim 23 as just a structure and the structure is Ersek.

Now, I think that's a fundamental change, but I can live with that. I can litigate that completely different case. That's not the point of my comment except to put in context what they are doing as a result of their fundamental change in their defense strategy.

Now, to develop that strategy, the first, I think the single worst thing they are doing is focusing on the cancellation of Claim 13. In the opening, Mr.

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Badenoch said, and the next package in your pile is a collection of documents, including summaries, from the opening.

Claim 13 is cancelled, still cancelled today, and they said that Claim 23 is still okay. Why? Because it has a smooth surface.

And this was an implicit argument. All that makes Claim 23 valid is its smooth surface. There are many, many things wrong with that argument.

First, on the facts, we cancelled Claim 23 as the record reflects, not because we agreed with it, because we're in re-examination and as we said, in the record, we sought patent rights that could be forced against infringers, so we're foregoing an appeal.

The law is very, very, very clear on this. Section 282, each claim is independently presumed valid, and even if, even if Claim 13 were invalid, which it isn't, the law is that a dependent claim shall be presumed valid, even though dependent upon an invalid claim.

The case law is to exactly the same effect. The case law is you can't do a domino-type approach carving off elements and say the patent turns on any one element. The case law says a patentee is not required to fight tooth and claw over every possible

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thought an examiner had. These kind of battles may bear on claim interpretation and we've had lots of arguments about that. I don't begrudge anything arguing the file wrapper for claim interpretation, but the cancellation of a claim, even if it were an admission of obviousness, which it was not, or even if it was found obvious, is not relevant to the obviousness inquiry.

Each claim is presumed valid and you must look at all of its limitations as a whole. And so the attempt to whittle down Claim 13 to the smooth element, and they now say -- after I've complained over the weekend, they now say they're not going to focus on the smooth element, they're just going to point it out.

And, of course, it's hard to imagine what pointing it out does other than raise doubts in the jury's mind about why there's only one element that patentability supposedly depends upon. And the theory that patentability depends only on the smooth element isn't in any expert report and it is not relevant to this remand trial because, of course, the definition of smooth has not changed.

So there are a collection of slides. You know, Cordis effectively gives up Claim 13 and pursues 23 to add smooth surface, cancels Claim 13. This is just wrong-headed. It's off the reservation. It misleads

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the jury.

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MR. DISKANT (Continuing): And it focuses on only one claim in dispute, which is wrong.

They then continue that -- based on their new-found argument that this is just a structure and incorporates no use and method ideas.

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MR. DISKANT (Continuing): And so they, in this last set of slides I've attached, they now compare Claim 23 to Claim 51, which requires a stent on a balloon. Claim 23 does not do that.

They compare it to Claim 1, which describes a method of implanting. They have a purported legal instruction from their engineer about what method claims and device claims are. They then compare the device of Claim 23 with what a method claim would look like.

They compare the device with and without the supposed method. All of this is legal instruction from a mechanical engineer that will not be repeated in the charge and is not right. It focuses on only one claim in issue. It focuses on the finding, the validity of Claim 23 in comparison to other claims rather than on its own terms. And it's particularly egregiously wrong

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in this remand case where, as your Honor knows, we tried in the first instance a method claim as well as a product claim. We tried Claim 44, which includes a balloon. We won that on infringement. Your Honor set it aside because it was filed for the purpose of litigation. I hope we never get the need to get to an appeal on the issue. That is incorrect. It has not been resolved.

We're trying this one claim, 23, because that's what's left at this point in time. And even if we were not in an a remand situation, it would be simply wrong to attempt to assess the validity of Claim 23 by comparing it to other claims. There's only one analysis. You take the claims and you compare them to the prior art. And the other claims have nothing to do with it and are confusing and misleading, and I think highly prejudicial to my client.

I have, lastly, a proposed instruction for -- on a number of claims, which I will hand up. It's really based on the number of witnesses charged. It basically echoes the same thoughts, which is the number of claims and the number of witnesses.

I would ask that these demonstratives be stricken and this line of questioning barred from Dr. Buller.

THE COURT: All right. What I'm concerned

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about right now is the cross-examination of Dr. Buller so we don't hold our jury up.

So, Mr. Badenoch, if you would respond in terms of your anticipated cross, I would appreciate it. We will take this up at our next break.

MR. BADENOCH: Your Honor, yes. Thank you.

The point is, of course, that this is a device claim. There's simply no question about that. It's not a method claim. It is a claim for a structure. That's very clear. We have not changed our theory on that.

We are not going to say in these comparison slides, we are using them because we think the jury needs to be instructed on what the claim is and is not. We're not going to argue that it's invalid compared to other claims or invalid compared to Claim 13.

THE COURT: Doesn't my claim construction take care of that, though?

MR. BADENOCH: Well, your Honor, here's what has happened. The plaintiff, you see, has departed totally from that. They are trying the case on Dr. Palmaz's general idea, his method, his balloon expandable tent, his awards. We've had a drum beat of totally emotional prejudicial things talking about how great Dr. Palmaz's balloon expandable stent is, and how

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great his method is. And it is critical to try this case fairly that we point out that's not the claim in suit. We have to be able to point out it's not the claim in suit.

The other thing, your Honor, is that there are some issues, including thickness, for example, how you measure it, where the Court did decide that that would be a fact question. The construction did not end up putting in the Federal Circuit language on measuring thickness, and we understand that. But now that makes it very relevant to tell the jury what has been said before about thickness and how you measure it, including what they said in the file history.

When it comes to how you apply the Court's construction to the facts, we have to be able to say what Cordis said before in the public record. So we do have to refer, at least to that extent, in the file wrapper.

On Claim 13, my understanding of the --

THE COURT: Now, this has to do with what you anticipate cross-examining Dr. Buller on. That's what you are focusing on?

MR. BADENOCH: Yes, in part.

THE COURT: So tell me exactly what subjects you intend to cross-examine him on.

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MR. BADENOCH: Well, I intend to go into his understanding THAT it's a structure claim. I'm not going to put up the Snyder slides that counsel is complaining about with him, but I'm going to explain this is a structure claim. And then I'm going to talk about -- in fact, I can go into a little bit more detail. Your Honor, if we're going to discuss my outline for Dr. Buller, maybe he should step outside for just a minute.

THE COURT: All right. Dr. Buller, if you would step out for just a minute.

Thank you.

MR. DISKANT: Perhaps to speed this along, let me just be clear what I object to. Mr. Badenoch wants to examine Dr. Buller about Claim 23 and isn't it a structure claim. They can have at it as long as they want. I don't object to that.

I object to comparing it to other claims in the patent which implicitly suggest those comparisons are relevant to any issue in this case when they are not.

So that is the focus of my objection. If you are going to only examine about 23 and whether it's a -- that's fine. If there are other claims that could be asserted or shouldn't be asserted or Claim 13 has been cancelled, that's not fine. I don't object to questioning about what the file wrapper said about the

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thickness.

MR. BADENOCH: It's my turn.

MR. DISKANT: I understand. I just wanted perhaps to move it along.

MR. BADENOCH: The problem, your Honor, is for the jury to understand this, to show them a method claim and say, now, this is a method claim, it's not like Claim 23, that --

THE COURT: If there's no dispute that Claim 23 -- well --

MR. BADENOCH: No, because what's happening, your Honor, is they are trying the case based on the unobviousness of the method, and we've got to bring that back. We won't suggest that there's any -- you know, that there's some suspicious reason why the other claims are in the case or that the jury should speculate or anything like that. That's what I understood the complaint was about the opening. We won't say that.

If we talk about other claims with any of the witnesses today, it is only to make the jury understand that this is not a method claim, that a method claim looks like this, that this is not a balloon claim, the claim with a balloon in looks like this. And that's all we're going to do with it. And that, I think, is important for the jury to understand

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what the issue actually is.
And I would also just add that in Dr. Snyder's expert report, we have not changed theory on this. We did argue it both ways.
THE COURT: Where else is it?
MR. BADENOCH: I'm sorry?
THE COURT: I said where in his report --
MR. BADENOCH: In Paragraph 7, your Honor, the first sentence was, the Palmaz abstract and then someone would look for Ersek to work in that. But the next sentence is, on Page 2, moreover, I also expect to testify that the Ersek patent describes and illustrates a particular design for an expandable intraluminal graft that one of ordinary skill in the art who knew about balloon angioplasty and who read the abstract would have understood could be used as a balloon expandable stent.
And that is our case. We are using the abstract. We are using the idea that Ersek is almost exactly like the structure and to the extent someone wanted to use it as a stent like Palmaz, it would be obvious from what you know of balloon angioplasty to make slight modifications and do that.
THE COURT: All right.
MR. BADENOCH: And that's in the report.
THE COURT: I do have his report and we all

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know that if an expert goes beyond the bounds of his report, two things happen: Either he will be asked to step down or, if we go beyond that, you might be charged for the amount of time in the trial.
So I've got his report. I understand that there's no objection -- well, I'm not sure where the objections are. I'm going to allow the cross-examination to go forward but, as I've said on more than one occasion now, we are not writing on a blank slate and I, quite frankly, am not comfortable with using the file history to try this case when the Federal Circuit has reviewed the file history and -- well, and didn't enter judgment on it, and I have not entered judgment on it, and I'm not confident what relevance it has at this point.
MR. BADENOCH: Your Honor, can I just say one thing on that?
THE COURT: One thing. Then we need to get the jury.
MR. BADENOCH: Yes, I understand.
On the point of how you measure thickness, the Federal Circuit made a comment. The Court decided that was not intended to be part of the claim construction mandate, so we respect that.
Cordis has argued that you can interpret how you measure thickness by reading the specification. And

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they pointed to a passage about that. And that's about the preferred embodiment, when you cut the stent from a tube.
They also told, in the public record, that you measure thickness a different way when you are talking about a tube with twisted struts. And we have to be able to point that out. That's the only thing we're doing.
On that issue, what the public record says about how you measure thickness, is highly relevant.
THE COURT: All right. We're still not having a patent law expert to tell me that, though.
All right. Let's bring the jury in.
You need to get Dr. Buller in.
MR. BADENOCH: Yes, your Honor.
Will we address, then, later, the testimony from Mr. Witherspoon?
THE COURT: What testimony for whom?
MR. BADENOCH: Mr. Witherspoon is to be the patent expert, but he's not going to testify about the law and he's not going to testify about anything other than how the jury can find things in the file wrapper, which is exactly what experts normally do.
THE COURT: I have not allowed an expert witness here since I started showing the tape.

Page 5

MR. BADENOCH: It's certainly not going to overlap the tape, your Honor. We'll make the proffer.
THE COURT: I don't believe so.
As far as I'm concerned, if your expert is using the file history as his guide for how to do the measurements, then your expert must have reviewed the file history and can point it out. We don't need a patent law expert to do that.
And if he did not use the file history, then there's no relevance to it anyway.
MR. BADENOCH: The difference, of course, is he's talking about the technical meaning of the subject matter, which Mr. Witherspoon can't. Mr. Witherspoon can explain where you find these things.
THE COURT: Well, but the expert must have found it to use it.
MR. BADENOCH: Well, the expert can find it, of course.
THE COURT: Yes.
MR. BADENOCH: The jury is not as -- as he is in finding their way of big volumes.
THE COURT: Well, page numbers are a page number. An expert who looked at it to do his calculations can look at it and explain to the jury where he looked for his analysis.

Exhibit WW

- VOLUME P -
IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION, Plaintiff vs. MEDTRONIC AVE, INC., et al. — CIVIL ACTION NO. 97-550 (SLR)

BOSTON SCIENTIFIC CORPORATION, et al., Plaintiffs vs. ETHICON, INC., et al., Defendants — CIVIL ACTION NO. 98-19 (SLR)

CORDIS CORPORATION, Plaintiff vs. BOSTON SCIENTIFIC CORPORATION, et al., Defendants — CIVIL ACTION NO. 98-197 (SLR)

Wilmington, Delaware
Friday, December 15, 2000
7:35 o'clock, a.m.

BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury

Official Court Reporters

APPEARANCES:

ASHBY & GEDDES
BY: STEPHEN J. BALICK, ESQ.

-and-

PATTERSON, BELKNAP, WEBB & TYLER, LLP
BY: GREGORY L. DISKANT, ESQ.,
EUGENE M. GELERNTER, ESQ.,
WILLIAM F. CAVANAUGH, ESQ. and
MICHAEL J. TIMMONS, ESQ.
(New York, New York)

-and-

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MICHAEL ZACHARY, ESQ. and
ARTHUR GRAY, ESQ.
(Washington, D.C.)

Counsel for Defendants

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PROCEEDINGS

(Proceedings commenced at 7:35 o'clock a.m., and the following occurred without the presence of the jury.)

THE COURT: Good morning.

Let's get down to business. I guess we will go through the jury instructions then the verdict, so that we all have time to gather ourselves before we actually present this to the jury. I guess we can go page by page, or if you want to tell me the first -- wait a minute.

On Page 3, I have not stricken things from the record at this point. So do I have everyone's permission to cross out the instruction. Yes.

That is Page 4, Page 5 --

MR. GRAY: Your Honor, I think we are up through Page 10, with the deposition.

THE COURT: Anything before Page 13 from Cordis?

MR. DISKANT: No, your Honor.

MR. GRAY: Your Honor, 14, at least one valid patent claim, we don't see a reason for the at least.

THE COURT: Because you found, okay.

MR. GRAY: In the third line, where it says entitled to the full amount of damages, we don't see the need for the word full.

THE COURT: That is true. They are entitled to a full amount of damages.

MR. GRAY: Full implies more than --

THE COURT: It implies a complete, not an overflowing amount of damages, or does not imply something more than they are entitled to.

MR. GRAY: Total amount.

MR. DISKANT: It is the right amount.

MR. GRAY: It seems to have a connotation, your Honor. Maybe it's just me.

THE COURT: We will leave it at full.

MR. DISKANT: Your Honor, when we take out the word at least, it gives a strange emphasis to the one. It seems to me we should say because you found Claim 23 of the '762 patent to be valid and infringed, then keep going.

MR. GRAY: That would be fine, your Honor.

THE COURT: All right. 15.

MR. GRAY: In the second paragraph, your Honor, it says it is not relevant to the question of damages. I think more properly, it is not relevant to the question of lost profits, to a reasonable royalty,

Page 3869

for world. But for infringement we would have kept right on selling $500 million of stents a year and more in a growing market. It's a phony issue.

They showed you charts from 1998 and said, Oh, look, they only made 70,000 stents. Look at how little capacity they had. We had closed the plants. We had laid off the worse. People weren't buying our stents because they had taken our market share with infringing stents. Capacity is a phony issue.

I didn't see that 725,000 stent unit documenting backup. I showed you. The small units, 386,000, shows J&J had enormous capacity to make stents. I didn't hear any discussion currently. We ramped back up with BX Velocity from 4 percent, we are now at 20 percent of the market. Norman Noble can make 150,000 stents a month. Come on? What are we talking about here?

I think this was my favorite moment. Mr. Colbert said, It's hard to imagine anyone ravaging Johnson & Johnson. I don't know. They did a pretty good job. And now they say, Well, all right, we killed you, so you couldn't have made enough stents. As I say, it's a phony issue.

Oh, but by the way, when you look at their numbers on Radius, they say they immediately could have

Page 3870

ramped up and been half the market with Radius.

One more point on Radius. He showed you the chart where suddenly it goes from 68 percent to 50/50, what's wrong with that argument? It's very simple. Cordis had a minimal market share, from '98 until BX Velocity came out. Why? We were competing against other balloon expandable stents. If a doctor is going to pick a balloon expandable stent, he had a choice. He could use the AVE infringing stent, the ACS infringing stent or the NIR infringing stent or the Cordis stents. Of course, we had a small market share. The question you have to ask yourself is, take those three players out of the market, and what do you have? You have what the market looked like in 1996 and 1997. And no self-expanding stent would have changed that reality.

Talk about ACS for a moment.

Can I have X-31162, please?

There is no reference to the second diameter there. And I listened for an hour and ten minutes waiting for Mr. Colbert to respond to the picture that I put up, which explains why there is no reference to the second diameter there.

Can I have X-31835, please?

It's because you can't have it in a common cylindrical plane in the second diameter, because it is

Page 3871

expanded in a vessel. And it conforms to the vessel. That's why we are only talking about it in the first diameter. This definition of wall surface is talking about it in the unexpanded form. Why? Because in the expanded form, this is what it looks like. It's not in a common cylindrical plane at that point. It can't be.

They put up Ersek. X-31889. They put up the language, but I kept waiting to see if Mr. Colbert would respond to what I showed you, which is, when we are talking about the fixation sleeve and outwardly projecting edges, what are we talking about. We made it darned clear to the Patent Office what we were talking about. We are talking about it in the first diameter, unexpanded. How do we know that? As is evident from the specification of the patent with particular reference to Figure 1A. You folks have the patent. Go look at Figure 1A. What is it?

Unexpanded, in the first diameter. That's all we are talking about here. Why? That's all we can talk about, because once it's expanded in a vessel, it reacts to the vessel. If the vessel has plaque -- you saw the pictures, they never addressed those pictures. Why? They can't. Again, it's another phony issue.

They showed you measurements, references to measurements, measurements taken in air. Again, Dr. Snyder, why didn't he measure it in the pig vessel that

Page 3872

he tested? He didn't. He measured it in air. A stent doesn't -- isn't designed to function in air. It functions in a vessel, in a diseased vessel.

At the end of the day, the Multi-Link infringes Claim 23. Literally and certainly under the doctrine of equivalents. You folks have been through this exercise before, this is a much, much easier exercise. No issues about welds. No issues about use protruding. Walk through the claim and you will see all the elements are there. Both literally and under the doctrine of equivalents. Function, way and result are all the same with respect to the ACS Multi-Link when you look at the claim elements of Claim 23.

Cost. There was a reference to, you know, we had the data, you know, they didn't. Folks, we have produced millions and millions of pages of documents. If Dr. Bell could have figured out how to make his cost issue make sense, he had the data to do it.

The problem is, as I have said at the beginning, we have a factory. We make lots of things at that factory. We make balloons. We make catheters. We make guidewires. We make stents. Dr. Bell has arbitrarily said, Well, I can divine how much of the air-conditioning, how much of plant overhead, should be ascribed to each of those products. We don't do it that

MR. CAVANAUGH (Continuing): People can't come into the market and infringe, take sales away from the companies, propose lowball royalty rates and get away with it. That's why the law requires that infringers pay the full amount of damages.

I want to thank you again for your time.

One of my colleagues just handed me a note that said I made a mistake.

In calculating the reasonable royalty, you look at Boston's average selling price of $1,710. That's how we get to our $115 million, because the royalty is based on their selling price, which was substantially higher than ours.

I want to thank you again for your time. It's been -- as I said at the outset, it's been a long process and all of us are very thankful four your attention and your diligence and your service. Have a good weekend.

THE COURT: The question is, I have about 30 pages -- 39 pages of instructions, not as long as the original batch, but still some. Would you like a break before I read them?

All right. Why don't we hand them out, so you can follow along.

Oh. We don't have the new ones yet? All right.

(Pause.)

THE COURT: If she is not back in a minute, we will take a short break.

(Deputy Court Clerk returned and distributed the instructions).

MR. COLBERT: Thank you.

MR. CAVANAUGH: Thank you, Betty.

THE COURT: All right. Are we all set?

Members of the jury, I will now instruct you about the law that you must follow in reaching your verdict on the damages phase of the case.

As I did before your earlier deliberations, I will start by explaining your duties and the general rules that apply in every civil case, and then I will explain some rules that you must use in evaluating particular testimony and evidence. The reason I am repeating these rules is that they are very important.

Then I will explain the positions of the parties and the law you will apply in the damages phase of the case.

And last, as I have before, I will explain the rules that you must follow during your deliberations in the jury room, and the possible verdicts that you may return.

Please listen very carefully to everything I say.

You have two main duties as jurors. The first one is to decide what the facts are from the evidence that you saw and heard here in court. Deciding what the facts are you is your job, not mine, and nothing that I have said or done during this trial was meant to influence your decision about the facts in any way.

Your second duty is to take the law that I give you, apply it to the facts, and decide the amount of damages Cordis is entitled to by a preponderance of the evidence. It is my job to instruct you about the law, and you are bound by the oath that you took at the beginning of the trial to follow the instructions that I give you, even if you personally disagree with them. This includes the instructions that I gave you before and during the trial, and these instructions. All the instructions are important, and you should consider them together as a whole.

Perform these duties fairly. Do not let any bias, sympathy or prejudice that you may feel toward one side or the other influence your decision in any way.

You must make your decision based only on the evidence that you saw and heard here in court. Do not let rumors, suspicions or anything else that you may have

seen or heard outside of court influence your decision in any way.

The evidence in this case includes only what the witnesses said while they were testifying under oath and the exhibits that I allowed into evidence. Nothing else is evidence. The lawyers' statements and arguments are not evidence. Their questions and objections are not evidence. My legal rulings are not evidence. My comments and questions are not evidence.

During the trial, I may have not let you hear the answers to some of the questions that the lawyers asked. I also may have ruled that you could not see some of the exhibits that the lawyers wanted you to see. You must completely ignore all of those things. Do not even think about them. Do not speculate about what a witness might have said or what an exhibit might have shown. These things are not evidence, and you are bound by your oath not to let them influence your decision in any way.

Make your decision based only on the evidence, as I have defined it here, and nothing else.

You should use your common sense in weighing the evidence. Consider it in light of your every-day experience with people and events, and give it whatever weight you believe it deserves. If your experience tells you that certain evidence reasonably leads to a conclusion,

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Wall stent do not infringe Claim 23 of the '762 patent. The parties also agree that the Cook GR 1 and GR 2 stents and the Medtronic Wiktor stents were licensed by Cordis and that they were lawfully on the market as of the date that they became licensed.

However, Cordis and Boston Scientific disagree as to whether those stents would have been acceptable substitutes for the patented products. Boston Scientific contends that they would have been acceptable substitutes, while Cordis contends that they would not have been. In reaching your conclusion on this issue, you must apply the standard for what constitutes an acceptable substitute that I just told you about.

Both Cordis and Boston Scientific agree that the stents made by ACS are substitutes for the patented products. The parties agree that the ACS stents are noninfringing substitutes to the patented products after April 3, 2000, because Cordis and ACS on that date entered into a settlement agreement, which included a grant of a license to ACS under the '762 patent.

Cordis and Boston Scientific differ as to whether the ACS stents should be considered as noninfringing substitutes prior to April 3, 2000. Cordis contends that the ACS stents are not noninfringing substitutes prior to that date because Cordis contends

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that they infringed Claim 23 of the '762 patent prior to that date. Boston Scientific contends that the ACS stents are noninfringing substitutes because Boston Scientific contends that they have never infringed the '762 patent – and that should be infringed Claim 23 of the '762 patent.

Cordis has the burden of proving that the ACS stents should not count as noninfringing substitutes prior to April 3, 2000 by a preponderance of the evidence.

You must, therefore, determine whether ACS's stents infringe Claim 23 of the '762 patent. In making this determination, you should apply the instructions regarding infringement and the meaning of patent claims in dispute contained on Pages 21 through 40 of the set of jury instructions applicable to the earlier phase of the trial.

If you find that the ACS stents infringe Claim 23 of the '762 patent, then the ACS stents were not a noninfringing substitute until April 3, 2000. If you find that the ACS stents do not infringe Claim 23 of the '762 patent, then the ACS stents were noninfringing substitutes from the date ACS entered the United States market, October 3, 1997.

Further, AVE markets the MicroStent, GFX 1, GFX 2, and S series stents. It is agreed between the

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parties that these stents infringe Claim 23 of the '762 patent, and, therefore, are not noninfringing substitutes.

During the course of the trial, you may have heard about various settlement agreements between Cordis and other parties, which may have licensed one or more of the patents at issue in the liability phase of the trial.

Settlement agreements are not evidence regarding the value of a patent, the validity of a patent, or infringement of a patent. Parties settle lawsuits for various business reasons that may have nothing to do with respective views of the worth of any patent claim. Therefore, you should not consider the fact that a party entered into a settlement agreement as evidence that it infringed a patent, or that it agreed that it infringed the patent, or even that it believed it infringed a patent.

You must decide the issue of infringement for yourselves.

As I said before, to establish its entitlement to lost profits based on lost sales, one of the things that Cordis must prove is that there was demand for the patented products attributable to the claimed features of that product. Demand for the patented products can be proven by significant sales of Cordis' products or by significant sales of Boston Scientific's products.

As I indicated before, Cordis is only entitled

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to lost profits for sales it would have made but for the infringement. Accordingly, to be entitled to its lost profits based on additional sales that it claims it would have made, Cordis must prove that it would have had the ability to manufacture or otherwise obtain its product to make those additional sales, as well as the marketing capability to make those additional sales.

It is not necessary for Cordis to prove that Cordis and Boston Scientific were the only two suppliers in the market in order for Cordis to demonstrate entitlement to lost profits for some of Boston Scientific's sales. If the realities of the marketplace are such that noninfringing substitutes were available from suppliers who would have made only some, but not all, of the sales that were made by Boston Scientific, then Cordis may be entitled to lost profits on a percentage of the infringing sales.

The burden is on Cordis, however, to show to a reasonable probability that it would have sold that percentage if the NIR stents had never existed. By the same token, even if you find that Cordis and Boston Scientific would have been the only two suppliers of products having the advantages of the patented product, it does not necessarily mean that Cordis would have made all of Boston Scientific's sales. The burden is on Cordis

Exhibit XX

- VOLUME N -
IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION, Plaintiff vs. MEDTRONIC AVE, INC., et al. — CIVIL ACTION NO. 97-550 (SLR)

BOSTON SCIENTIFIC CORPORATION, et al., Plaintiffs vs. BYBICON, INC., et al., Defendants — CIVIL ACTION NO. 98-19 (SLR)

CORDIS CORPORATION, Plaintiff vs. BOSTON SCIENTIFIC CORPORATION, et al., Defendants — CIVIL ACTION NO. 98-197 (SLR)

Wilmington, Delaware
Wednesday, December 13, 2000
9:40 o'clock, a.m.

BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury

Official Court Reporters

APPEARANCES:

ASHBY & GEDDES
BY: STEPHEN J. BALICK, ESQ.

-and-

PATTERSON, BELKNAP, WEBB & TYLER, LLP
BY: GREGORY L. DISKANT, ESQ.,
EUGENE M. GELERNTER, ESQ.,
WILLIAM F. CAVANAUGH, ESQ. and
MICHAEL J. TIMMONS, ESQ.
(New York, New York)

-and-

JOHNSON & JOHNSON
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ALBERT J. BRENEISEN, ESQ.,
MICHAEL ZACHARY, ESQ. and
ARTHUR GRAY, ESQ.
(Washington, D.C.)

Counsel for Defendants

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PROCEEDINGS

(Proceedings commenced at 9:40 o'clock a.m., and the following occurred without the presence of the jury.)

THE COURT: I understand we have an issue. I have had an emergency to take care of. So if it has to be addressed before the morning break, we will. Otherwise, I have held the jury up and would like to get proceeding.

Mr. Cavanaugh?

MR. CAVANAUGH: I don't know what it is, your Honor.

THE COURT: Mr. Walker.

MR. WALKER: We wanted to confirm how you would like us to handle -- we anticipate we will want to make a few motions after they rest their case and we would like to know how you would like to handle that in front of the jury.

THE COURT: You do not handle it in front of the jury. We have motions and I will take them sometime when the jury is not here.

Let's bring the jury in. And I apologize for holding you all up.

(At this point the jury entered the courtroom and took their seats in the box.)

THE COURT: Members of the jury, I had to deal with some issues. I am the one who held you up. I apologize.

We will continue at this point.

Mr. Cavanaugh.

MR. CAVANAUGH: Thank you, your Honor. Good morning, ladies and gentlemen.

Our next and last witness will be Mr. Jesse Penn, who is the President of Cordis Cardiology. He is going to talk to you about manufacturing and capacity issues.

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PLAINTIFF'S TESTIMONY
CONTINUED

... JESSE R. PENN, having been duly sworn as a witness, was examined and testified as follows ...

DIRECT EXAMINATION

BY MR. CAVANAUGH:

Q. Mr. Penn, what is your current position?

A. I am the President of Cordis Cardiology USA.

Q. When did you begin working for Johnson & Johnson?

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Q. Now, when the cardiologist selects the stent, how does he select the length of the stent?
A. Well, you have to make sure you cover the whole lesion or the whole narrowing. So if you have a length of the vessel this long and you want to repair that and put a stent in, you wouldn't pick a stent that is exactly as long as the narrowing because, if you misplace the stent by even a fraction of a millimeter, you will have a little bit of that material hanging over the edge of the stent, which is a result you wouldn't want.
So you always need to pick a stent that is a little bit longer than the lesion, than the narrowing you were repairing.
Q. So with a Multi-Link, would there always be projecting edges that could imbed that are going beyond the lesion area?
A. Right. Regardless of what you think the material on the inside would do to the behavior of the stent, you always have more healthy tissue at either end that you're anchoring into.
Q. Okay. One last subject. I'd like to now talk for a moment about the doctrine of equivalents in Claims 13 and 23. Do you have an understanding of the doctrine of equivalents?
A. Generally, yes.

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Q. Could you explain to the jury your understanding?
A. Well, the way I understand it is for something to be, one product to be equivalent to a description in a patent that the accused product has to basically do the same thing, do it in basically the same way and get essentially the same result in order to be considered equivalent.
Q. So how does the ACS Multi-Link compare from a doctrine of equivalents perspective to Claim 13?
A. Well, I think it works in a very different way. So it shouldn't be considered equivalent.
Q. What is the different way? Could you explain that, please?
A. The design intent of the Palmaz and the Palmaz patent is for the device to keep this common cylindrical, this very low profile in both states. In the unexpanded state to help with insertion and then the expanded state to keep the profile of the stent low in the vessel. The design intent in the ACS stent is to intentionally flare out and get superior anchoring in the vessel, reduce the chances that the stent will move.
Q. And how does the ACS Multi-Link compare to the prior art in connection with the Medinol?
A. It's using the same thing. It's using twisting of the metal using outwardly projecting edges in both cases

Page 3332

to achieve this anchoring
MR. BRENEISEN: Could we just highlight the wall surface having a substantially uniform thickness? And also a thin-walled tubular member?
BY MR. BRENEISEN:
Q. Do you, in your opinion, find there is an equivalent -- let me start over. How, in your opinion, did the ACS stents compare to the portion of Claim 13 which calls for a thin-walled tubular member having first and second ends and a wall surface to the wall surface having a substantially uniform thickness?
A. In both cases, in the expanded state they don't exist in the ACS stent.
Q. And is there any equivalent in the ACS stent to what is set forth in Claim 13?
A. No. Because the ACS stent is trying to get something that is not thin-walled and not of uniform thickness.
MR. BRENEISEN: I have nothing further, your Honor.
THE COURT: All right. I think it's time for our morning break, so before we start cross-examination, let's take 15 minutes.
(Short recess taken.)
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(Court resumed after the recess.)
THE COURT: Anything before we bring the jury in?
MR. DISKANT: No, your Honor.
THE COURT: We'll stop at 1:00, come back at 1:30 and go to 3:30.
(At this point the jury entered the courtroom and took their seats in the box.)
THE COURT: Mr. Diskant.
MR. DISKANT: Thank you, your Honor.
CROSS-EXAMINATION
BY MR. DISKANT:
Q. Good morning, Dr. Snyder.
A. Good morning.
MR. DISKANT: Can we have the picture on the screen?
BY MR. DISKANT:
Q. Just see if we can have common ground. The ACS stent, looking here at the unexpanded, I guess this is the TriStar, is designed to provide a certain amount of outward pressure when it is expanded and implanted in a diseased tissue?
A. Right. The outwardly projecting edges they're called

Exhibit YY

- VOLUME J -
IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF DELAWARE

CORDIS CORPORATION, Plaintiff vs. MEDTRONIC AVE, INC., et al. — CIVIL ACTION NO. 97-550 (SLR)

BOSTON SCIENTIFIC CORPORATION, et al., Plaintiffs vs. STERICON, INC., et al., Defendants — CIVIL ACTION NO. 98-19 (SLR)

CORDIS CORPORATION, Plaintiff vs. BOSTON SCIENTIFIC CORPORATION, et al., Defendants — CIVIL ACTION NO. 98-197 (SLR)

Wilmington, Delaware
Thursday, December 7, 2000
7:35 o'clock, a.m.

BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury

Official Court Reporters

APPEARANCES:

ASHBY & GEDDES
BY: STEPHEN J. BALICK, ESQ.

-and-

PATTERSON, BELKNAP, WEBB & TYLER, LLP
BY: GREGORY L. DISKANT, ESQ.,
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ARTHUR GRAY, ESQ.
(Washington, D.C.)

Counsel for Defendants

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PROCEEDINGS

(Proceedings commenced at 7:35 o'clock a.m., and the following occurred without the presence of the jury.)

THE COURT: All right. A couple preliminary explanations, so then we can go through this for purposes of stating your objections for the record, correcting typos, making minor revisions.

First of all, with -- and I don't know where we stand with this, but in terms of whether there still is a question of prosecution history estoppel before the '762 patent, having reviewed the new Circuit case in Festo, and I have no idea, this is on Page 24 of 80 or whatever I have of Lexis. I think clearly that's a question for the Court.

And so, if it's an issue, it's not an issue for the jury.

MR. GRAY: Your Honor, I'm sorry, but may I just interrupt for a second?

THE COURT: Yes.

MR. GRAY: We agree. We have a JMOL on that issue I would like to hand up (handing documents to the

Court).

THE COURT: With respect to contributory infringement, we struggled -- we being me and my Law Clerks -- struggled with the question, and I didn't find the -- I didn't find the case law particularly persuasive but for one case, because this one case is the only one that actually addressed the issue. Everything else, it was just trying to look at the facts and divine what the situation was.

And this is the case from the Northern District of California, 1999. I have no idea how to pronounce this. Farugia (phonetic) Laboratories. That Court said there's got to be some connection. It's not a substantial relationship. It's not no connection. It's some connection.

Now, I, frankly, don't know whether that has been established. I think its posit has been established.

So if we need, we can try to fit in argument about that, but that's why I chose that language. It's based on that case.

MR. DISKANT: Your Honor, we disagree with it as a matter of law and, therefore, object to the charge, but on my rebuttal with Dr. Buller, I will make sure it gets connected up. So I don't think there will be a factual problem.

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in the wall surface of a tubular member as by the removal of material.

Smooth surface. The outside of a wall surface of the unexpanded tubular member has a continuously even surface without roughness, points, bumps or ridges, especially to the touch.

Terms found in the asserted claims of the '332 patent:

Segment. A piece or separate fragment of something, one of the constituent parts into which a body is or may be divided.

Generally tubular shape. The phrase segment having a generally tubular shape is broader in scope than the phrase tubular member and may encompass segments that are not perfectly hollow, elongated or cylindrical in shape.

Plurality of openings. More than one opening. That is more than one breach or aperture.

Openings forming a series of alternating open and closed portions. All openings have open and closed portions. The closed portions comprising the materials – the material that gives form to or encloses the openings. It serves to block or shut off entry or passage in some fashion.

The claim requires that the openings in the

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segment alternate around the circumference so that each end of a segment consists of alternating open and closed portions.

The Court construes the phrase at issue to mean a combination of openings, some of which are opened, that is without a closing material at the end of the segment, thus permitting ingress and egress and some of which are closed, that is having a closing material at the end of the segment, thus blocking the shutting off entry of passage.

Connector. Discrete structure disposed or particularly arranged between adjacent tubular members in order to join them together. The language of the claim, that is comprising a connector, does not require that the claim be limited to a single connector.

Whereby each of the segments may be displaced at an angle with respect to the longitudinal axis of an adjacent segment, when the stent is delivered through a curved portion of the access or coronary arteries.

Displaced means to remove from the usual proper place, to put out of place.

And angle is a figure formed by two lines diverging from the same point or by two services diverging from the same point.

Axis is defined as a straight line with

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respect to which a body or figure or system of points is either radially or bilaterally symmetrical.

The phrase modifies the word segment. The phrase is written in the case that the entire segment, not a portion thereof, must be capable of angular displacement with respect to the longitudinal axis of the adjacent segment, not a portion thereof. In light of the specification which speaks only in terms of the connector being disposed to flexibly connect, rather than in terms of flexible segments, the Court concludes that the limitation requires relatively rigid segments and relatively flexible connectors.

Terms found in the asserted claims of the '312 and '370 patents.

Undulating. Rising and falling in waves, thus having at least a crest and a trough.

Longitudinals and longitudinal structures. Structures that extend or run lengthwise in the direction of the stent's longitudinal axis. Although there is no requirement that the longitudinals or longitudinal structures extend the entire length of the stent, the structures have to extend long enough to be considered continuous across a number of points of support.

Closed perimeter cells. A relatively small area on the perimeter of the stent that is bounded on all

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sides by continuous metal.

The word closed means to block or shut off entry or passage.

The word perimeter means the boundary of a closed plane figure, outer limits.

Zig-zag segments. A portion of the stent that has one or more short sharp turns or angles.

Stent or stent structure. A device used to support, expand or hold open an artery or other body passageway.

A patent owner may enforce his right to exclude others from making, using or selling the patented invention by filing a lawsuit for patent infringement. A company accused or threatened with an accusation of patent infringement may bring a lawsuit against the patent holder for declaratory judgment that it does not infringe the patents and that the patents are invalid.

Here, Boston Scientific brought such a suit for declaratory judgment, asserting that the NIR stent did not infringe the '762 patent, and that this patent is invalid. Cordis has sued Boston Scientific and has alleged that the NIR stent infringes Claims 23 and 24 of the '762 patent, Claim 22 of the '332 patent, Claim 21 of the '312 patent, and Claims 25 and 26 of the '370 patent.

Patent law provides that any person or business entity which makes, uses or sells without the patent owner's permission, any product apparatus or method, legally protected by at least one valid claim of the patent within the United States before the patent expires infringes the patent.

Cordis is asserting that Boston Scientific directly infringed all of the asserted claims except Claim 44 of the '762 patent.

There are two ways in which a patent claim may be directly infringed. First, a claim may be literally infringed. Second, a claim may be infringed under what is called the doctrine of equivalents. With respect to Claim 44, Cordis does not claim that Boston Scientific itself directly infringes the claim but, rather, alleges that Boston Scientific is liable for contributory infringement.

Boston Scientific denies all of Cordis' infringement allegations.

The preambles to all the asserted claims use the transitional phrase comprising. Comprising is interpreted the same as including or containing. In patent claims, comprising means that the claims are open-ended. As such, the claim is not limited to only what is in the claim based on its explanation. If you find

that the NIR stent includes each element in an asserted claim, the fact that it may also include an additional element is irrelevant. The presence of additional elements in the NIR stent does not mean that the NIR stent does not infringe an asserted claim.

For the NIR stent to literally infringe any of the asserted patent claims, the subject matter of the patent claim must be found in the NIR stent. In other words, any of the asserted patent claims is literally infringed if the NIR stent includes each and every element in the asserted patent claim. If the NIR stent omits any single element decided in a given patent, Boston Scientific does not literally infringe that claim. You must determine literal infringement with respect to each asserted claim individually. Please remember the question is whether the NIR stent infringes any asserted claims of the patents and not whether the NIR stent is similar to a product made by Cordis. Accordingly, you must be certain to compare the NIR stent with the claim it is alleged to infringe and not with any product made by Cordis.

If you have found that any of the asserted claims is literally infringed, you may nonetheless consider whether the NIR stent is so far changed in principle from the literal words of the claim that a doctrine called the reverse doctrine of equivalents is

applicable.

Application of the reverse doctrine of equivalents is the exception, not the rule, and is limited to those situations where a defendant's product is so far changed in principle that, although it performs the same or a similar function to produce substantially the same result as that defined by a patent claim, it does so in a substantially different way.

If you find noninfringement under the reverse doctrine of equivalents then you should not consider infringement under the doctrine of equivalents.

If you do not find literal infringement, you may consider infringement under the doctrine of equivalents. Under the doctrine of equivalents, you may find that the NIR stent infringes an asserted patent claim if, for each element of the claim that is not literally present, the NIR stent contains an equivalent of that element. This instruction applies only to the claims of the '762 and '332 patents.

Cordis is not contending that the NIR stent infringes the '312 or '370 patents under the doctrine of equivalents. Application of the doctrine of equivalents is the exception, however, not the rule. Patent claims must be clear enough so that the public has fair notice of what was patented.

Notice permits other parties to avoid actions which infringe the patent and to design around the patent. On the other hand, the patent owner should not be deprived of the benefits of his patent by competitors who appropriate an invention while avoiding the literal language of the patent claims. The test to determine equivalents under the doctrine of equivalents is whether the differences between the claim element, which you have found not to be literally present, and the element present in the NIR stent are insubstantial. If you find that the claim element and the element of the NIR stent have only insubstantial differences, then you will have determined that the element in the NIR stent is equivalent to the claimed element.

On the other hand, if you find that the claim element and the element in the NIR stent have substantial differences, then you will have determined that the element in the NIR stent is not equal, then, to the claimed element.

In determining whether the differences are substantial or insubstantial, you may also consider whether or not the claimed element and the element in the NIR stent perform substantially the same function in substantially the same way to produce substantially the same result. Keep in mind that the doctrine of equivalents

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cannot be applied so as to effectively eliminate a claim requirement in its entirety.

The question of whether there is a substantial or insubstantial difference between the element found in the NIR stent and the claimed element is to be determined as of the time of the alleged infringement rather than at the time the patent application was filed or the patent issued.

You have heard evidence that Boston Scientific has obtained patents on stents. In connection with that evidence, I instruct you that the grant of a patent only gives the patent owner the right to exclude others from making, using or selling the invention. It does not give the patent owner the right to make, use or sell an invention.

For that reason, the device that is covered by a subsequent patent may still infringe an earlier patent. Nonetheless, in considering the issue of infringement under the doctrine of equivalents, you may consider that Boston Scientific obtained the patent, which may be some evidence that the differences between the NIR stent and the asserted claim elements are substantial. Such evidence should be considered along with other evidence, other similarities and differences between the asserted claim elements and the NIR stent.

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You may find that the NIR stent represents an improvement over the invention defined in the asserted patent claims and even that it may have obtained patents on these improvements. However, you are not to presume that these facts mean that Boston scientific could not have infringed the asserted patent claims. As long as the NIR stent includes all of the elements of an asserted claim, either literally or by equivalence then that asserted claim is infringed by the NIR stent despite Boston Scientific's improvements.

THE COURT (Continuing): On the other hand, the fact that Boston Scientific has obtained patents on these improvements may be considered in determining whether or not the NIR stent is substantially different from the asserted claims.

Boston scientific would be liable for directly infringing an asserted patent in this case if you find that Cordis has proven by a preponderance of the evidence that Boston Scientific has sold or offered for sale the invention defined in at least one of the asserted claims of that patent.

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THE COURT (Continuing): A person may directly infringe a patent without knowledge that what he is doing is an infringement of the patent. He may also directly infringe, even though in good faith he believed that what he is doing is not an infringement of any patent.

Cordis alleges that Boston Scientific has directly infringed all of the asserted patents, but for Claim 44 of the '762 patent. Cordis alleges that Boston Scientific has indirectly infringed Claim 44.

Cordis does not contend that Boston Scientific directly infringes Claim 44 of the '762 patent. Instead, Cordis contends that Boston Scientific indirectly infringes that claim by contributory infringement.

Contributory infringement of a claim that describes a process is established where one offers for sale a device which may be and ordinarily issues and is sold with the intention of being used in the manner described in the claim. That is the patent holder must establish that a device was sold and used in carrying out a process described in the claim of the patent, and that the seller knew the product was especially made for that purpose and not a staple article suitable for a substantial noninfringing use.

Thus, Cordis must prove by a preponderance of

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the evidence each of the following to establish contributory infringement of Claim 44, which covers a method of medical treatment:

One, that Boston Scientific sold or supplied the NIR stent.

Two, that the NIR stent is not a staple article of commerce capable of substantial noninfringing use.

Three, that Boston Scientific sold or supplied the NIR stent with knowledge that the NIR stent was especially made for use in the manner claimed in Claim 44 in the '762 patent or that the NIR stent is actually used in a manner that directly infringes the claim.

And, four, that every step of the method of medical treatment described in Claim 44 is performed either by a single entity or by different persons or entities who have some connection to each other.

In determining whether the NIR stent is a staple article of commerce, you should focus on the NIR stent actually supplied by Boston Scientific and you should take into account the quality, quantity and efficiency of the suggested uses. That a product is known to have potential infringing uses is not sufficient to establish contributory infringement. You should also consider in this regard the uses for which the NIR stent